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PROGRESS REPORT

ON

FOREST ADMINISTRATION

IN

UPPER BURMA

FOR

1890-91.

By J. W. OLIVER, Esq.,
OFFG. CONSERVATOR OF FORESTS.

WITH A REVIEW BY THE CHIEF COMMISSIONER, AND THE ORDERS OF THE GOVERNMENT OF INDIA.

RANGOON:

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA.

1891.

No. 1222-F., dated Simla, the 31st October 1891.

From—J. W. P. MUIR-MACKENZIE, Esq., C.S., Offg. Secretary to the Government of India, Revenue and Agricultural Department,

To—The Chief Commissioner of Burma.

I AM directed to acknowledge the receipt of Mr. Kynoch's letter No. 472—79-M., dated 28th August last, forwarding the Progress Report on Forest Administration in Upper Burma for the year 1890-91, together with your Resolution thereon.

2. The basis of all systematic forest management is a complete forest settlement, and His Excellency the Governor-General in Council is consequently gratified to observe that this principle is so fully recognized and acted up to in the Forest Administration of Upper Burma.

The trouble now taken and the expense incurred in providing a legal title, as complete and unassailable as possible, over the State forest property will be amply repaid in future by the possibility of introducing order and system in the working of the forests.

3. Although the country had for many years been exploited for teak and other forest-produce, the extent, position, and capabilities of its forest resources were almost unknown. The forests were sometimes described as on the verge of exhaustion; at others as practically inexhaustible. Under these circumstances it was necessary that a general examination of the forest resources of Upper Burma and its dependencies should precede any proposals towards permanent reservation and consequent systematic management. Since the annexation of the province some 16,000 square miles of forests have been thus examined, and this fact is in itself sufficient evidence that the Forest Administration under your control spares no pains to become acquainted with the property in its charge. The Governor-General in Council is specially gratified to notice that the examination of the forest resources has been extended to the Shan forests. It is, however, a matter of regret that the result of these examinations has been generally to confirm the opinion, which at first was only based on speculation, that the teak-forests of Upper Burma have greatly suffered from the wasteful manner in which they were exploited, without any sort of control, previous to the annexation; and His Excellency in Council trusts that the energies of the Forest Department will now be directed towards an amelioration of this valuable property.

4. His Excellency in Council is pleased to observe that special attention has been paid to the examination of cutch-areas, with the view of constituting permanent and extensive reserves of this class of forests. Reservation of cutch-tracts may not always be possible, but the Government of India do not quite follow your argument that it is incompatible with the existence of a considerable cutch-boiling population. It might be presumed, judging from a purely economical point of view, that the creation of cutch-reserves, under conditions which would not preclude the forests being worked to the utmost of their "possibility," would be the safest means of securing a permanent supply of the raw material required for the industry of cutch-boiling; but, however this may be, the act of reservation does not, in itself, necessitate any further interference with the rights and practices of the cutch-workers than the Local Government may consider desirable.

5. The actual reservation completed during the year under review amounted to 35 square miles in the Ruby-mines District; but 1,394 square miles were under settlement in various districts, and an additional area of 1,800 square miles was notified under section 4 of the Upper Burma Forest Regulation. These figures afford, His Excellency in Council is pleased to acknowledge, ample proof of activity in this direction.

6. The Government of India cordially agree with you that the work done by the Forest Department in connection with topographical and linear valuation surveys is highly creditable and of considerable value. It enables the Forest Staff to regulate the working of the lease-holders; and considering that these surveys, which it is understood are recorded on maps of the forests, already comprise 38,427 acres, a store of information is being collected which at no distant date may serve as a basis for accurate Working-Plans.

The Government of India, however, also endorse your remarks that in the interest of forest conservancy the preparation of Working-Plans, even of a rough description and to be revised as additional information is collected, should be pushed on as rapidly as possible.

7. The cancelment of cutch-licenses is evidently a punishment most suitable to the offence of cutting undersized trees, and is reported to have had a salutary effect. His Excellency in Council regrets that the practice of unauthorized felling and girdling of green teak trees seems still prevalent in the Southern Shan States, and approves of the suspension of the license to work the forests of Thaton which had been granted to the Myoza. The other Chiefs will no doubt be dealt with as opportunities occur.

8. Fire-protection is as yet in its infancy in the new province, but His Excellency in Council trusts that the question will be approached in the same systematic way which has characterized progress in the other branches of forest administration in Upper Burma, and that the local conditions will be fully studied before the isolation of the forests from savanna lands is undertaken. Fire-protection of areas selected at haphazard, and carried on in disregard of local conditions, is almost always expensive and frequently unsuccessful, and here again, as in all other forest work, system and order based on local enquiries are the mainspring of success.

The necessity for early and energetic action as regards fire-protection is clearly proved by the remarks made on natural reproduction in paragraph 36 of the Conservator's Report.

9. It is observed that only 23,257 teak trees were girdled during the year, though the programme sanctioned by you provided for the girdling of 52,000. The failure to carry out the programme was due to the disturbed state of parts of the country in which it was proposed to carry out the operations, and also to the fact, already noticed, that some of the forests were found to be exhausted of marketable trees.

10. The exploitation of forest-produce has been so fully and ably dealt with that no further remarks seem needed on the part of the Government of India. The outturn of the year compares as follows with that of the previous year :—

Agency by which removed.	Timber.	Fuel.	Bamboos.	Minor produce.
	C ft.	C.ft.	No.	Rs.
Government agency ...	174,635	...	...	...
Purchasers	8,826,885	1,740,058	14,882,376	1,97,107
Free grants	2,368	...	...	...
Total in 1890-91	9,003,888	1,740,058	14,882,376	1,97,107
" 1889-90	9,414,530	1,233,449	14,030,132	1,38,931
Difference in 1890-91 ...	—410,642	+506,609	+852,244	+58,176

11. The financial results of the year compare as follows with those of 1889-90 :—

Year.	Receipts. Rs.	Charges. Rs.	Surplus. Rs.	Proportion of Surplus to gross Revenue. Per cent.
1890-91	16,44 297	3,02,315	13,41,982	82
1889-90	18,06,069	2,73,799	15,32,270	85
Difference in 1890-91 ...	—1,61,772	+28,516	—1,90,288	—3
Average for the four years ending 1889-90.	7,56,190	2,36,448	5,21,742	69

The results fall short of those of the previous year, which must as yet be considered abnormal and were due in great measure to the exceptional facilities for floating, but are nevertheless satisfactory; and the Government of India endorse your remarks regarding the increase in those sources of revenue which are due to efficient management, and less dependent on a favourable floating season than the extraction of timber by lessees.

12. It is once more the pleasant duty of the Government of India to record its appreciation of a year's good work.

The forest administration of Upper Burma was started on sound principles, and the credit of the Department for systematic and steady progress has again been maintained by Mr. Oliver and the staff of officers under his control.

[K. C. .M]

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LIBRARY

RESOLUTION

ON THE

FOREST ADMINISTRATION PROGRESS REPORT

OF THE

UPPER BURMA CIRCLE

FOR

The year 1890-91.

Extract from the Proceedings of the Chief Commissioner, Burma, in the Forest Department,—No. 69M., dated the 24th August 1891.

READ—

Report of the Conservator on the administration of the forests in the Upper Burma Circle for the year 1890-91.

Submission of report.

RESOLUTION.—The report was due in the Secretariat on the 30th June and was received on the 13th July. Under orders recently issued divisional reports are now submitted through Deputy Commissioners and Commissioners, and delays in the transmission of reports delayed the preparation of the Conservator's report. The Chief Commissioner desires that Deputy Commissioners and Commissioners will allow no delay to occur in future years in transmitting reports sent to them for remarks. Some officers, the Chief Commissioner observes, forward the reports without remark. A Deputy Commissioner who takes a proper interest in, and is acquainted with, the forest work in his district will always find something useful to say on the divisional report, particularly with reference to the attitude of the people towards the Forest Department and to the manner in which forest rules are enforced. The Chief Commissioner expects all Deputy Commissioners in future to show that they have some acquaintance with the working of the Forest Department in their districts.

Reservation of forests.

2. The principal operations of the Forest Department during the year under review consisted in examining forests with a view to their reservation and protection. In the course of the year an area of 35 square miles was reserved in the Ruby Mines district and enquiries were held by Forest Settlement Officers with a view to the reservation of areas aggregating 1,394 square miles in the Chindwin and Pyinmana districts. These areas will probably be reserved in the course of the current year. Notifications of intended reservation were published with regard to an additional area of 1,800 square miles, but no further steps have been taken to reserve them. It is hoped that it will be possible to spare one or more Assistant Commissioners during the ensuing cold season for forest settlement duty, but the exigencies of the general administration render it difficult to make officers available.

Examination of forests.

3. Progress was made during the year in the work of examining forests, and the total area of protected forests that have been roughly examined was increased from 9,114

to 16,014 square miles. These examinations were carried on principally in the Chindwin division, where 705 square miles, in the Minbu division, where 888 square miles, in the Mu division, where 243 square miles, in the Yaw division, where 350 square miles, and in the Shan States, where 580 square miles were examined. The general conclusion which may be drawn from the Conservator's summary of the examinations made is that the wasteful working of the years which preceded the annexation of Upper Burma has to a great extent depleted the forests of teak and that the duties of the Forest Department in reference to many teak-growing areas will for many years to come be confined to fostering its reproduction.

Examination of cutch forests.

4. Particular attention was paid during the year to the examination of cutch forests. From the Conservator's report it appears that the principal cutch areas exist in the Minbu, Mu, Pyinmana, and Yaw divisions. In some parts the cutch has been entirely or almost entirely worked out. In others the tree is still plentiful. The question of the measures to be taken to protect cutch in Upper Burma received consideration during the year. The experience of Lower Burma has shown that cutch will be exterminated unless its extraction is carefully regulated. The most effective way of regulating extraction is no doubt to reserve cutch-bearing areas. But reservation is not always possible. It cannot be carried out in tracts where there is a considerable cutch-boiling population. To reserve cutch areas in these localities would be to deprive a large number of people of their means of livelihood. Accordingly the policy which it has been decided to pursue is to reserve cutch areas which are as yet unworked or are not situated in populated tracts and to carefully regulate the cutch industry in localities where reservation cannot be carried out. The object which has to be kept in view is to prevent the felling of undersized trees. The felling of undersized trees has always been forbidden by the rules, but difficulty has been experienced in enforcing the law because evidence can rarely be obtained to bring home cases of illegal felling to particular individuals. In order to meet this difficulty it has been decided to insist on the joint responsibility of cutch-boilers for the felling of undersized trees. Cutch-boiling is carried on in small camps of a few workers, who fell trees in the immediate vicinity and drag them to the camp. It has now been made a condition of all licenses that, if an undersized tree is found in a cutch camp, all the licenses held in that camp shall be liable to be cancelled under the orders of the Divisional Forest Officer. It has further been directed that in future licenses shall be issued by Divisional Forest Officers only and that large numbers of licenses shall not be given to single speculators. Henceforth licenses will be issued to actual workers only. It is hoped that the effect of the measures stated above will be to prevent the felling of undersized trees in Upper Burma. The Chief Commissioner desires the Conservator and all subordinate officers to watch carefully the effect of the new regulations and to deal fully with the subject in the report of 1891-92.

Surveys and working plans.

5. The total length surveyed with a view to the preparation of maps, exclusive of surveys in the Shan States, was 2,554 miles against 2,009 miles in the previous year. The largest amount of work was done in the Chindwin and Minbu divisions. There

was a large increase in the area over which linear surveys and countings extended, the area covered having amounted to 20,446 acres against 6,639 acres in 1889-90 and 11,342 acres in 1888-89. As the Government of India remarked in its orders on last year's report these surveys and countings form the basis of rough working plans, the preparation of which is desirable in view of the overworking from which almost all forests have suffered during recent years. The increase in the area covered as well as in the countings, which were effected on a considerable scale in five divisions (Bhamo, Chindwin, Minbu, Pyinmana, Yaw), is a satisfactory feature of the year's report. Rough working plans were under preparation during the year for the Taungdwingyi, Kyaw, and Yaw forests. The preparation of working plans is a matter of much importance in the interests of forest conservancy and the Chief Commissioner desires the work of preparing them to be pushed on as rapidly as possible.

Forest offences.

6. The following table exhibits statistics of offences during the last three years:—

Year.	New cases taken into Court.	Compounded cases.	Total.	Proportion of convictions to total number of cases decided by Courts.
1888-89	9	16	25	98
1889-90	99	47	146	81
1890-91	110	115	225	71

The increase which took place during the year may be ascribed to the extension of forest operations. There is no reason to suppose that the penal provisions of the forest law are enforced in such a manner as to harass the people.

Fire-protection.

7. Fire-protection in Upper Burma is as yet in its infancy. The only area of which the protection was attempted by means of cleared fire-lines consisted of two plantations 11 acres in extent in the Katha division. One plantation was protected, the other suffered from fire. An area of 5,590 acres was protected by means of village watchers in the Ruby Mines district. It is satisfactory to learn that the wanton firing of forests in the Pyinmana division, which prevailed two years ago, is no longer common.

Experimental cultivation.

8. The experimental cultivation of the eucalyptus was carried on at Bhamo, Bernardmyo, Mogôk, Maymyo, and in the Shan States. The experiments were on the whole a failure, Maymyo being the only place in which the plants thrived. The experiments are being continued and it is hoped that they will ultimately result in the acclimatization of the species in the Shan States and other sub-mountainous localities, the climate of which seems adapted to it. Experiments were also made with partial success at Bernardmyo with English fruit trees, deodar, and other species of foreign woods. The total cost of experiments was Rs. 3,350.

Girdling.

9. In 1890-91, as in the previous year, the girdling programme was not completely carried out. The girdling of 52,000 trees was sanctioned, but of these only 23,257 were

killed. The failure to carry out the programme was due partly to disturbances in the Chin country, Wuntho, and on the Bhamo frontier partly to the absence of suitable timber. It was found that the forests in the Mandalay, Mu, and Pyinmana divisions, in which the Bombay Burma Trading Corporation had asked that large numbers of trees might be girdled, had been almost entirely denuded of marketable trees.

Extraction of timber.

10. The following table gives particulars of the quantity of timber which passed revenue stations in 1890-91 and compares the total figures of that year with the figures of previous years:—

	Teak.	Other reserved kinds.	Unreserved kinds.	Firewood and charcoal.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
By Government agency	3,487	...	6	...	3,493
By lease-holders	117,635	...	...	..	117,635
By local purchasers	39,551	432	12,920	34,801	98,704
Under free permits	40	...	7	...	47
Passed into Lower Burma paying import duty ...	...	...	...	...	...
Total 1890-91 ...	160,713	432	18,933	34,801	214,879
Total 1889-90 ...	180,609	651	8,335	24,669	214,264
Total 1888-89 ...	139,430	825	7,329	14,874	162,458
Total 1887-88 ...	78,379	212	2,309	17,570	98,470

The most noticeable differences between the figures of 1889-90 and 1890-91 consisted in the increase in the quantity of teak extracted by Government agency and of unreserved wood, firewood, and charcoal extracted by local purchasers, and in the decrease in the quantity of teak extracted by license-holders. The increase in the quantity of teak extracted by Government was due to the collection of timber from the Mogaung forests, which lapsed to Government on the insolvency of the former lessee, Maung Bauk. The increase in extraction of unreserved wood, firewood, and charcoal may be ascribed to the extension of forest operations and took place mainly in the Pyinmana division. Eight thousand four hundred and ninety-three tons of unreserved woods were brought to revenue stations in this division against 882 tons in the previous year. The timber consisted principally of sleepers of pyinkado and other woods extracted by the Bombay Burma Trading Corporation for supply to the Mu Valley Railway. The falling off in the quantity of timber extracted by lessees was due to the fact that 1890-91 was a less favourable year for floating timber than 1889-90.

Minor forest produce.

11. The principal items of minor forest produce in Upper Burma are India-rubber and cutch. The revenue realized on these products in 1890-91 was Rs. 1,08,678 and Rs. 80,405 against Rs. 82,546 and Rs. 50,800 in 1889-90. The revenue realized from other minor produce was Rs. 40,366 against Rs. 33,768 in 1889-90. During the year under review the question of the best manner of levying the duty on India-rubber was under consideration. Until 1888 the monopoly of collecting India-

rubber was sold by auction. In that year the monopoly system was abandoned and a duty of 8 annas a viss was levied on all rubber exported. It was represented in 1890 that the new system encouraged the destruction of the trees by excessive tapping as it was no one's interest to see that tappings were properly made. After consideration the Chief Commissioner, though disposed to hold that the abolition of the monopoly had been somewhat premature, decided that sufficient information was not available of the effects of the two systems to justify his reversing, without local enquiry, orders so recently issued by his predecessor. The rubber forests are situated in a remote part of the Bhamo district and are almost entirely unexplored. They are under the control of Kachin Sawbwas, who employ their tribesmen to collect the rubber and sell it to Chinese traders. During the ensuing cold weather a column will be sent through the rubber-producing tracts and it will then be possible to obtain accurate information concerning the forests, to introduce rules for their proper exploitation, and to decide under what system the duty shall in future be collected.

Revenue and expenditure.

12. The revised estimates of receipts and expenditure in the Upper Burma Forest circle in 1890-91 as finally sanctioned by the Government of India were—

	Rs.
Receipts	16,28,000
Expenditure A, Rs. 95,000 } Expenditure B, Rs. 2,28,000 }	3,28,000
Surplus ...	13,00,000

The actual revenue was Rs. 16,44,297 against Rs. 18,06,069 in 1889-90, the actual expenditure Rs. 3,02,315 against Rs. 2,73,799 in that year, and the surplus Rs. 13,41,982* against Rs. 15,32,270. The differences in receipts in the two years corresponded with the differences in the quantities of timber and produce extracted. The following statement shows the receipts under the principal heads during the last two years:—

Receipts on account of	1889-90.	1890-91.
	Rs.	Rs.
Timber worked out by Government agency	3,514	58,346
Payments by licensees	14,42,519	11,19,819
Timber used locally	1,36,204	1,67,725
Firewood, charcoal, and bamboos	39,840	47,079

On the whole the figures are satisfactory and creditable to the forest administration of the year. The decrease which took place in receipts as a whole was due to causes beyond the control of the Forest Department, namely, the unfavourable floating season and the consequent failure of lessees to extract as much teak as in 1889-90. On the other hand there was an increase in those sources of revenue the development of which depends on the efficiency of the forest management.

Forest leases.

13. The lease of the Shweli forests, which was granted to Maung Bauk in 1889-90, lapsed in 1890 on the insolvency of Maung Bauk and the question of the future management of the forests was under consideration during the year of report. Tenders for working them were called for, but no acceptable ones having been made for

* The ultimate surplus was Rs. 13,33,413, a sum of Rs. 8,569, which was overpaid by a lessee on account of duty on teak in 1890-91, having been refunded in 1891-92.

working the forests as a whole, it was decided to arrange for the working of each forest separately. One of the forests has now been leased to Mr. Darwood, and negotiations are in progress for leasing others to Haji Mahomed Hadi, who holds a lease of the Mogaung forests. The minimum outturn stipulated by the leases was extracted from all leased forests in Upper Burma except those formerly held by Maung Bauk.

Shan States forests.

14. During the year under review a Forest Officer was deputed to examine and report on the Shan States. Pending the submission of his report and the issue of general orders regarding forest administration in the Shan States permission was granted to the Sawbwas of Maukmè, Maingpan, and Mobyè, and the Thatôn Myoza to work out girdled teak on payment of Rs. 200 a year for each elephant employed and on condition that no green teak was cut. This last condition was infringed by the Thatôn Myoza and the permission granted to him was withdrawn for some months. Mr. Jackson, the Forest Officer deputed to examine the forests, made a tour through the States of Thatôn, Maukmè, Maingpan, and Monè between January and April 1891. He found 20 square miles of teak-producing forest in Thatôn, 133 in Maukmè, 185 in Maingpan, and a considerable area, not precisely defined, in Monè. His examination of the forests led him to the conclusion that they had been generally overworked, a natural consequence of the system, or rather want of system, hitherto followed in working the forests with the sole object of extracting the greatest possible amount of timber of all marketable sizes and growths. Mr. Jackson's report is now under consideration and orders will shortly be issued with regard to the future management of the forests.

15. The Upper Burma circle was administered during the year by Mr. Oliver. The Chief Commissioner acknowledges the ability and energy with which Mr. Oliver managed his large and important charge, as well as the good services of subordinate officers to which Mr. Oliver testifies in his report.

By order of the Chief Commissioner,

C. G. BAYNE,

Secretary.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

UPPER BURMA CIRCLE

FOR

The year 1890-91

BY

J. W. OLIVER, Esq., Offg. Conservator of Forests,

CHAPTER I.

Area and Boundaries.

1.—Area.

A.—Reserved Forests.

Reserves sanctioned.

During the past year the following tracts in the Ruby Mines district have been constituted reserved forests :—

	Acres.
Ôngaing reserve	2,880
Bamôn reserve	920
Mogôk reserve	560
Yebu reserve	400
Peikswè reserve	440
Kyenidaung reserve	2,000
Bernardmyo reserve	12,160
Kathe reserve	1,280
Kyatpyin reserve	1,840
Total ...	22,480

or 35 square miles.

Additional areas preliminarily notified.

2. The areas proposed for reservation and preliminarily notified during the year are given below :

Division.	Forest preliminarily notified in previous years.	Forests notified during 1890-91.			Total for each division.
		Name of forest.	Square miles.	Number and date of notification.	
	Sq. miles.				
Bhamo ...	64	Uya Hatha ...	24	Notification No. 112, dated 17th July 1890.	125
		Molmyin ...	60	Notification No. 167, dated 2nd October 1890.	
		Hmangin ...	41	Notification No. 168, dated 2nd October 1890.	
Chindwin ...	442	Bôn ...	114	Notification No. 222, dated 11th December 1890.	710
		Kampat ...	59	Notification No. 223, dated 11th December 1890.	
		Kindat ...	132	Notification No. 7, dated 8th January 1891.	
		Laungtaung ..	96	Notification No. 10, dated 8th January 1891.	
		Kunzè ...	116	Notification No. 11, dated 8th January 1891.	
		Yu ...	193	Notification No. 39, dated 19th February 1891.	
Carried over ...	506	...	835	...	835

Division.	Forest preliminarily notified in previous years.	Forests notified during 1890-91.			Total for each division.
		Name of forest.	Square miles.	Number and date of notification.	
	Sq. miles.				
Brought forward	506	.....	885	.....	885
Katha ...	487	Setkala ... Namme ... Kunchaung and Thè chaung. Maingtha ... Nahan ... Nampan ...	747	Notification No. 197, dated 13th November 1890.	747
Minbu ...	*Nil*	Pazuchaung ... Kôktochaung ... Tichaungwa ... Pachaung ...	63	Notification No. 215, dated 8th December 1890.	63
Mu ...	190	Sereiktha ... Nankyitha ... Naubian ...	15 107 33	Notification No. 54, dated 10th April 1890.	155
Pyinmana ...	830	...	...	...	...
Total ...	2,013		1,800		1,800
Deduct ...	64	Excluded by Notification No. 167, dated 2nd October 1890, Bhamo division.			
Also deduct ...	35	Finally notified as reserved forests Notifications Nos. 30, 31, 32, and 33, dated 11th February 1891, Katha division.			
	1,914				
Add ...	1,800	Notified during the year.			
Total ...	3,714	Proposed reserves still under settlement.			

The following, which are included in the above statement, have been enquired into by the Forest Settlement Officers, but no final orders have as yet been issued :—

Division.	Forest.	Miles.
Chindwin ...	Matu	180
	Kampat	59
	Kindat	132
	Yu	193
Pyinmana ...	Yeni	70
	Minbyin	170
	Yônbin	125
	Yanaungmyin	15
	Kaing	45
	Palwè	100
	Ngalaik	140
	Taungnyo	85
	Pozaungtaung	80
	Total ...	1,394

Special Settlement Officers could only be appointed for short periods in the Chindwin and Pyinmana divisions. Elsewhere the District Officers who had been appointed had no leisure to take up forest work.

Further reserves in progress.

3. Two additional tracts in the Chindwin division known as the Ahlaw and Patolôn forests, respectively 49 and 40 square miles in extent, and a tract of 37 square miles known as the Pachaung forest in the State of Ywangan in the Mandalay division were also proposed for reservation, but have not yet been notified. Further proposals for the reservation of large areas of teak and cutch are in course of preparation.

B.—Protected Forests.

Alterations in Form 49.

4. The area of protected forests that have been roughly examined has been increased from 9,114 to 16,014 square miles. The following is a summary of the results of the year's work.

Forests in the Bhamo division.

5. *The Nampa forest*, 30 square miles, was partially examined by the Divisional Officer. It has been heavily worked, but there is some large timber still left in it and the younger classes are well represented.

Mr. O'Bryen accompanied a column that went from Mogaung *viâ* the Namyin valley to Indawgyi and returned by the Indawgyi stream. He was not allowed to diverge from the line of march and saw but little of the forests. A tract of very rich forest was found in the low ground round the Indawgyi lake. Teak is here only found in the plains and is generally surrounded by kaing grass which, as the result of annual fires, is rapidly encroaching into the forest. On the banks of the river between Indawgyi and Kamaing some small patches of *Ficus elastica* were met with.

Description of the forests in the Chindwin division.

6. *The Upper Yu or Gamona forest.*—This is a rather narrow strip of forest covering about 55 square miles. It yielded 7,000 girdled trees and is well situated in regard to timber export.

The Wesalaung and Wesalun forest occupy an area of about 60 square miles of very broken country, which renders the extraction of timber difficult. The export lines are, however, capable of improvement by blasting; 7,000 trees were girdled in these forests this year.

Forests on the Upper Myittha and Chawhlaw chaungs, 150 square miles.—Teak is found as a rule only in the ravines, but is fairly sound and straight, though not attaining any great height. The forest has been overworked, but natural re-production has been good and it will again become valuable.

The (teak and cutch) forests on the Upper Maw (a tributary of the Myittha), 200 square miles, are very poor both in teak and cutch. The portion on the Tilin chaung was at one time valuable, but it has been overworked and there has been but little re-production.

The Bôn (teak and cutch) forest (on the Upper Myittha, 40 square miles.—The teak forest along the basin of this stream is exceptionally rich; cutch of good quality is also fairly plentiful; 500 teak trees were girdled in it during the past year.

The North Yoma (teak and cutch) forest, 140 square miles, between the Pondaung and Mahudaung ranges.—Teak is found principally along the lower spurs of the former, appearing only in a stunted form on the Mahudaung slopes, which, however, contain some good cutch; 3,686 trees were girdled in this forest.

Thinkadôn forest, 60 square miles.—This forest has at one time been very rich, but there are now few first class trees left. Teak is confined to the eastern and lower slopes of the Mahudaung.

Description of forests in the Katha division.

7. *The East Nampan forests, 30 square miles on the north-east of and contiguous to the proposed Nampan forest*, is reported to contain much large teak timber, both green and girdled, but it has not yet been examined by a Forest Officer.

Forests on the north bank of the Upper Shweli, 28 square miles.—These are contained in a long, narrow strip bordering the Shweli. They are said to be completely exhausted of large timber.

Matataung forests (north of the Shweli), 6 square miles.—Timber of good quality is still being brought from these forests, but they have not yet been examined.

The Tadaunggwè forest consists of narrow strips of teak forests on the stream of this name which runs into the Shweli below Pinlôn. It contains some teak of large size, but only about 5 square miles are teak-producing.

Nampan forest, 50 square miles, on the stream of that name, which joins the Shweli at Pinlón.—Teak is only found in depressions in the In forest. The forests were formerly worked to a considerable extent and still contain some fine timber. They have as yet been only partially examined.

Kónbaung forest, 20 square miles, on the east side of the range of hills between Petsut and Tigaing.—Teak appears to be confined to the lower slopes and the land bordering on cultivation. All trees over 5 feet in girth were girdled four or five years ago.

Hintha forests on the east bank of the Irrawaddy.—Teak is found only along the banks of the Hintha chaung and its feeders, and disappears ¾ of a mile on either side of the stream. The teak-producing area is about 4 square miles and still containsa few first class trees.

The Taukta and Kogyi forests, 10 square miles, situated on feeders of the Nyaunglón stream, which flows into the Irrawaddy at Tagaungmyo, are reported to contain good timber but they have not yet been visited.

The Zibin forest at the sources of the Zibin chaung, which runs into the Irrawaddy at Myadaung.—Teak is only found in the depressions, and all large trees have been worked out. The teak-producing area is about 5 square miles.

Forests in the Mandalay division.

8. *The Zawgyi forests in Yatsauk territory.*—Teak is here confined to narrow strips along the streams. The most important forest is on the Nammelin chaung, but the total area under teak in the Zawgyi drainage probably does not exceed 20 square miles. The forests were very heavily girdled over some 12 years ago, but the girdling was badly done and very few trees have died. Hardly any have been brought out as the Zawgyi is obstructed by rocks. On the higher hills there is a large extent of forest of *Pinus Kasya.*

Forests between the Namlan and Myitngè rivers in Yatsauk.—These are scattered over an area of 250 square miles, of which only about 30 miles are teak-producing. Teak is as usual generally confined to the low ground near streams. The forests have been heavily worked; 1,142 trees have been girdled in them during the past two years, but they will yield no more for some time to come. Teak is said to be more abundant on the upper waters of the Namlan, but the river disappears underground for a considerable distance, and there is no means of getting the logs out.

Madaya forest.—The examination of this forest was continued, but is not yet completed. It is reported to contain 5,150 girdled trees. In addition to these 566 logs partly worked out by the late lessee were found and marked with the Government property mark.

Forests in the Minbu division.

9. *The teak and cutch forests in the Taungdwingyi subdivision drained by the Yabi, Bangón, Kyaukmigyaung, Kinmuntaung, Yinmalè, Ngamin, Sadón, and Sun chaungs, aggregating 538 square miles,* have been examined. They contain a considerable quantity of teak, the younger classes being fairly represented. In the best parts, however, cutch has been absolutely exterminated, the original trees being all of marketable size were worked out and the dense shade has prevented re-production. In the lower and more open parts the species is beginning to re-assert itself and with protection it will be possible to resuscitate the forest.

Nwamadaung (cutch) forests, 150 square miles, lying to the north of the road from Salin to Sidóktaya.—At the foot of the hills the forest consists of mixed cutch, than, dahat, and ingyin. Cutch is very plentiful, but numbers of undersized trees have been felled. On the slopes of the Nwamadaung it is of better growth, but young trees are scarce.

Món (cutch) forests.—The forests on the west of the Món river between the Aung and Dwe chaungs, extending over an area of about 200 square miles, have been examined. Cutch extends for 4 or 5 miles from the Món river into the hills and has till recently been protected by fear of Chin raids, but during the last two years it has been heavily worked. Teak is not numerous, but is occasionally associated with cutch and sometimes extends to the edge of the forests of pines mixed with oaks and chestnuts, which cover the higher slopes.

10. *The Thaw forests*, now estimated at 171 square miles, were further examined and proved to be completely worked out. Padauk is abundant in the western portion of the tract.

Forests in the Mu division.

The Baw forest.—Forty-two square miles of the tract have been examined. Teak is found in most of the valleys, which are said to contain 3,000 trees girdled for the late lessee, but left by him as too difficult to extract; padauk is also plentiful.

Sadwingyi (Hngetpyittaung) forest, 30 square miles, on the headwaters of the Sadwingyi chaung. All marketable trees have been worked out and no trees were found fit for girdling; padauk is fairly plentiful.

11. The cutch forests mentioned in paragraph 12 of last year's report were fully examined; their total area amounts to 129 square miles. Countings, extending over 1,814 acres, give the following results: marketable cutch trees 146, undersized cutch trees 5,977, which proves that the area, though almost denuded of marketable trees, contains a very fair amount of young growth. It is understood that the land is all cultivable, and the Deputy Commissioner strongly protests against any of it being reserved, though he has no objection to special rules being framed for the protection of cutch. A further report on this subject will be submitted later on.

Forests in the Pyinmana division.

12. *Kyaw (teak and cutch) forests, 350 square miles.*—The teak in the valley of the Kyaw is situated chiefly on the eastern slopes of the Pôndaung range, and is found generally in patches and belts on the lower slopes and along the ravines, the hills in between being covered with indaing. With the exception of the northern part of the valley, the forest has been heavily worked and girdling seems to have been carried on in a most reckless manner. There are said to be some 7,000 dead trees still standing, but a large proportion of them are mere poles. Cutch is abundant, chiefly along the forest bordering the cultivation which stretches almost in one continuous belt along the bed of the valley; 742 teak trees were girdled during the past season near the source of the Kyaw. Cutch-boilers have not yet penetrated to this valley.

Description of forests in the Yaw division.

13. The teak forests on the Salween drainage in the Southern Shan States were inspected by Mr. Jackson, Deputy Conservator of Forests, who was specially deputed for that work. They consist almost invariably of narrow belts stretching along the edges of streams between high hills, covered on their lower slopes with dry ingyin forest and towards their summits with *Pinus Kasya* forests or grassy downs. They have all been heavily worked and their outturn will have to be very much reduced in future. The forests which were examined or regarding which information has been obtained are detailed below.

Description of forests in the Southern Shan States.

The Forests in the State of Thatôn.—These are situated between the Pun and Tabet chaungs and extend over an area of 80 square miles, of which only about 20 square miles produces teak. Seventeen elephants were employed in working them last year and 800 logs were dragged to floating streams. The Pun chaung is much obstructed by rocks and its improvement will be a matter of great difficulty. The stock of girdled trees is estimated at 6,600 trees and the future outturn of the forest at 500 trees a year.

The forests in *Maukmè* are as follows:

	Sq. miles.
Pun chaung	... 20
Kadugyi	... 40
Pein chaung	... 15
West Salween	... 8
East Salween	... 50
Total	... 133

Ninety-seven elephants were at work in these forests last year, the outturn being 2,895 logs. The stock of girdled trees is estimated at 6,100, and the future annual yield of the forest at 1,650 trees.

The forests in the State of Maingpan comprise the following:—

	Sq. miles.
Nampan	... 10
Hwéhôn	... 13
West Salween	... 12
East Salween	... 150
Total	... 185

The total outturn last year was 3,662 logs on the dragging of which 109 elephants were employed. The future yield of the forest is estimated at 1,750 trees a year. The stock of girdled trees was not ascertained.

The Monè forests are situated in Kyaingtaung, principally on the Salween river, though some small areas fall within the Tein drainage. Teak is nowhere abundant and the forests are generally overworked. The outturn last year was 3,102 logs, 96 elephants being employed. The stock of girdled trees is estimated at 4,450 and the future annual yield at 1,700 trees.

2.—Boundaries.

14. The Ruby Mines reserves in the Katha division were not sanctioned till near the close of the year and the work of permanently demarcating them was only just commenced.

In the Pyinmana division the boundaries of the proposed reserves were demarcated by continuous blazed lines in places where they are in danger of being encroached on by traders. The total length of line so marked out was as follows—

	Miles.
Yanaungmyin reserve all round	... 18
Yeni reserve on the east and south	... 24
Minbyin reserve on the south	... 7
Pozaungtaung reserve on the south	... 6½
Total	... 55½

The cost of the demarcation amounted to Rs. 105.

CHAPTER II.

Surveys, Working Plans, and Annual Plans of operations.

(a) *Topographical Surveys.*

Surveys and maps.

15. Exclusive of surveys made by Mr. Jackson the length of lines traversed with chain and plane-table or prismatic compass amounted to 2,551 miles. The following maps compiled from surveys of previous years were printed during the year by the Forest Survey Branch:—

Map.	Area in square miles.	Scale.
Yu	193	1" to the mile with silver prints 1" to 2 miles.
Proposed Kindat reserve	132	
Proposed Taungdwin reserve	412	

Surveys in the Bhamo division.

16. The Nampa forest, 30 square miles in extent, was surveyed by Mr. Palmer, and some additional surveys were carried out in the Hmangin forest. The total length traversed was 80 miles.

Surveys in the Chindwin division.

17. Messrs. Slade and Forteath executed traverses aggregating 222 miles in length in the Upper Yu, Wesalaung, Wesalun, and Mawku forests, of which maps are now being prepared. Mr. Thompson traversed 126 miles on the Myitha and North Yama valleys. The surveys in the former valley are in-

complete, but the latter has been sufficiently surveyed for present requirements. Altogether material has been collected for mapping 325 square miles.

Surveys in the Katha division.

18. The Divisional Officer carried out 22 miles of traverse in the Meza forests and 32 miles in the Shweli forests. In the Ruby Mines district Mr. Buchanan completed a survey of 150 square miles of country comprising the Sagadaung teak forests and the Shwe-udaung oak and chestnut forests.

Surveys in the Mandalay division.

19. The Divisional Officer traversed 157 miles on the left bank of the Myitngè river and Mr. Dun 172 miles in the same locality. In the Madaya forests 119 miles were traversed by Mr. Calderwood.

Surveys in the Minbu division.

20. In the Taungdwingyi forests 421 miles were traversed by Mr. Bruce with plane-table and compass, and 89 miles by the Ranger under his orders, and a map has been completed showing 538 square miles. In the Nwamadaung and Môn forests of the Minbu district the Divisional Officer, Mr. Aplin, with two surveyors, has carried out surveys sufficient to complete maps of 150 and 200 square miles respectively. The length of line traversed was 462 miles.

Surveys in the Mu division.

21. The following tracts were surveyed by Mr. Murray:—

	Square miles.
The Thaw forest	171
The Baw forest (a portion only)	42
The Sadwingyi forest...	30
Total ...	243

The length of line traversed was 123 miles.

Surveys in the Pyinmana division.

22. The total length traversed was 235 miles. The surveys were principally in the eastern part of the division.

Surveys in the Yaw division.

23. Surveys have been carried out over 250 square miles in the Kyaw valley and northern portion of the Yaw forests. The length of line traversed was 294 miles.

Surveys in the Southern Shan States.

24. Mr. Jackson has completed a sketch map of the forests in Thatôn, Maukmè, Maingpan, and Monè.

(*b*) *Valuation Surveys.*

Summary of valuation.

25. Linear surveys and countings extended over 20,446 acres distributed over the different divisions as shown below. Details are given in Appendix C.

	Acres.
Bhamo division	284
Chindwin division	1,914
Katha division	51
Mandalay division	2,263
Mu division	442
Minbu division	9,913
Pyinmana division	2,404
Yaw division	3,185
Southern Shan States	40
Total ...	20,446

Notwithstanding that owing to disturbances work was practically at a standstill in three divisions during the greater part of the season the total length of lines surveyed and the area counted out is largely in excess of that of last year.

(*c*) *Working Plans.*

Rough working plans.

26. Sufficient information has been collected for framing rough working plans for the Taungdwingyi forest in the Minbu division and the Kyaw and Yaw forests in the Yaw division, which is now being worked up.

27. In the Pyinmana division the examination of the forests east of the Sittang shows that wherever the extraction of timber is possible girdling has been excessive. Similar results were obtained in the Thaw and Baw forests of the Mu division.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

(*a*) *Establishment.*

Controller staff.

28. The writer of this report held charge of the circle throughout the year under review. Mr. Rind, Deputy Conservator of Forests, who was in charge of the Pakôkku division, proceeded on leave on the 25th June 1890, and was subsequently transferred to India, being succeded in Pakôkku by Mr. Toussaint, Officiating Deputy Conservator of Forests. Mr. Blackwell, Officiating Deputy Conservator, was transferred to the Pegu circle on the 23rd June 1890, and Mr. Jackson, Dêputy Conservator, was transferred to this circle on the same date and placed on special duty in the Shan States on the 12th November 1890.

Messrs. Burn-Murdoch, and Forteath, newly appointed Assistant Conservators arrived in Rangoon on the 1st January 1891 and were posted to the Pyinmana and Chindwin divisions.

Executive staff.

29. Mr. W. A. Hearsey, a passed student of the Dehra Dun Forest School, was appointed a Sub-Assistant Conservator on 30th December 1890, and posted to the Bhamo division.

Subordinate establishment.

30. A revised scale of permanent, office, forest, depôt and elephant establishment at an average annual cost of—

	Rs.
Office	30,342
Forest	29,778
Depôt	12,984
Elephant	3,804
Total ...	76,908

was sanctioned by the Government of India and brought into force on the 1st September 1890.

The following shows the cost of permanent and temporary establishment employed compared with that of the previous year :—

	1889-90.	1890-91.
	Rs.	Rs.
Permanent.		
Forest and Depôt—BI*c*	22,583	27,264
Office—BI*d*	15,937	21,037
Elephant—AVI*b*	...	1,557
Temporary.		
AII	1,890	1,173
AIII	3,845	2,695
AVI*b*—Elepant establishment	8,769	9,297
BI*c*—Forest and Depôt	...	915
BI*d*—Office	8,600	5,295
Total ...	61,624	69,238

(*b*) *General Protection and Breach of Forest Rules.*

General.

31. The Upper Burma Forest Regulation was amended by Regulation No. VIII of 1890, which came into force on the 14th August 1890. With a view of preventing the adulteration of cutch a rule was made providing that the same duty charged for cutch should be levied on the manufacture of decoctions of various kinds of bark. The rules regarding the manufacture of cutch were under consideration, but no changes were actually made during the year under review.

A clause was added to the conditions under which licenses to buy rubber are issued providing that the license shall be forfeited if the licensee creates a disturbance or interferes with other licensees.

A notification was issued raising the present rates of duty on teak timber to an average of Rs. 8 per ton on logs in the round. The enhanced rates came into effect on the 1st May 1891, three months' notice of the change having been given. One revenue station was abolished and nine new stations were established.

Breaches of Forest law.

32. There were 27 cases pending at the commencement of the year and 201 new cases were reported, showing an increase of 53 on those of the previous year. Ninty-seven cases implicating 167 men were tried in Court and convictions obtained in 69 cases against 133 men. Thirteen case were still undisposed of at the close of the year. Twenty of the cases shown as acquittals were cases pending from the previous year, in which, owing to want of sufficient evidence, no further proceedings were taken. One hundred and fifteen minor cases, in which 186 persons were concerned, were compounded by Divisional Officers on payment of sums aggregating Rs. 2,413-6-6. In three cases the offenders were undetected. Only 26 cases of cutting green teak were reported, which shows a very satisfactory decrease on the figures of last year; 73 cases were in connection with cutch-boiling, the largest proportion being in the Minbu division. This, however, does not represent all the cases that actually occurred, as the Minbu Divisional Officer reports that in addition to the cases entered in Form 50 he impounded a large number of cutch licenses for breach of Condition 1 of the license and refused to issue new licenses to the offenders. This was practically a heavier punishment than any fine that could have been inflicted and has had a most salutary effect. In the Southern Shan States numerous cases of felling and girdling green teak were discovered in the States of Thatôn, Monè, Maingpan, and Maukmè. The license to work his forests granted to the Myoza of the former State has in consequence been cancelled, but no punishment was imposed on the other Chiefs.

(c) *Forest Fires.*

Fire in the Bernardmyo plantation.

33. Protection by means of cleared fire-lines was only attempted in the case of the small plantations of 6½ and 4½ acres at Bernardmyo and Mogôk in the Katha division. Fire was kept out of the latter, but 1½ acres of the former were unfortunately burnt, the following trees being injured or destroyed:—

	Year of planting.	Plants.
Pinus excelsa	... 1887	150
Deodar	... 1887	105
Cupressus torulosa	... 1889	885
Pinus longifolia	... 1889	750
Eucalyptus	... 1890	170
Pinus excelsa	... 1890	A small patch.

The fire occurred on the 19th February. At midday a large fire was observed approaching the plantation on the windward side and, in spite of all efforts of the men in charge to beat it out, sparks were carried across the 40 feet broad cleared fire-line setting the short grass in the plantation in a blaze. The fire spread till it reached a cross fire-line, where it was put out. Mr. Buchanan was away at Mogôk on census work at the time, but arrived just as the fire was got under control. Most of the deodar trees have since recovered.

Area unburnt in Ruby Mines district.

34. The season was an unusually dry one and the forests are generally reported to have been burnt over, but in the Ruby Mines proposed reserves, by employing watchers to put out fires and by enlisting the help of the villagers, fire was kept out of 5,590 acres at a cost of Rs. 126-8-0, the amount paid to watchers. The villagers are said to have done their best to prevent fires, and nearly all cases were traced to Maingtha coolies, who had come down in large numbers for work.

35. In the Pyinmana division 155 square miles escaped burning without any special protective measures being adopted. The Divisional Officer reports that wanton firing of the forests, which was so common two years ago, is no longer prevalent, and that, with few exceptions, the fires could be traced to the savannahs in the eastern part of the district. Under these circumstances fire-protection should not be difficult when once the forests have been reserved.

Area unburnt in the Pyinmana division.

(d) *Natural Reproduction.*

36. There is little to add to the remarks made in the reports of former years. As a rule in Upper Burma the reproduction of teak is insufficient or wanting altogether, and it is not likely to be much improved until fire-protection can be established.

Remarks on natural re-production.

In dry open forest and forests resorted to by taungya cultivators reproduction of cutch is almost invariably good, but in the moister hill forests, where the best cutch is found and where the trees are nearly all matured, the removal of the cutch trees does not as a rule open up the cover sufficiently to allow the young growth to establish itself, and in such forests the system of allowing all trees of a certain growth to be felled must eventually result in the elimination of the species.

(e) *Experiments and Exotics.*

37. The *Eucalyptus* plants mentioned in paragraph 44 of last year's report all died during the rains. A number of new seedlings of different species have been raised and will be planted out during the rains. The Para rubber plants are doing well.

Bhamo division.

38. The experimental plantations at Bernardmyo and Mogôk have been increased by 2¼ acres and the blanks in the area burnt over have been replanted with *Cupressus torulosa* and *Pinus longifolia*, mixed with *Quercus glauca*.

Katha division.

39. The following is a list of the fruit trees in the Bernardmyo orchard :—

Fruit trees at Bernardmyo.

Apples ...	77
Pears ...	64
Peaches ...	72
Plums ...	8
Cherries ...	18
Nectarines	18
Walnuts ...	23

The apricots all died and there has been a large percentage of loss among the apples, pears, plums, and cherries. Peaches and nectarines do well and promise to be a success, a few of the former are now in bearing. The apples flowered well, but failed to set their fruit. A number of grafts have been made on native peach and apple trees, but the curiosity of the Shan labourers has destroyed a large number.

40. There were three small patches planted with this tree at Bernardmyo. The oldest was destroyed by fire and the younger ones by frost. The species does not grow so well at Bernardmyo as at the lower elevation of Mogôk, where 720 trees have been put out. It does not appear to be any better than the indigenous *Pinus Kasya*, which it much resembles, and further experiments are hardly necessary.

Pinus longifolia.

41. Six hundred and eight plants were put out at Bernardmyo at distances of 10 feet apart with *Pinus excelsa* diagonally between them; 100 of these died from the effects of transplanting and some more were killed by fire. The remainder are healthy and growing vigorously. There is a further supply of young trees in the nurseries, which will be planted out in due course.

Deodar.

Abies Smithiana and *Webbiana* *Pinus Gerardiana.*

42. The seedlings of these species were removed to a nursery at a higher elevation at Bernardmyo, where they are getting on better.

Pinus excelsa.

43. Five hundred and eighty-six plants were put out during the rains mixed with the deodar, 186 died from transplanting and 100 were killed by fire. There are a large number of young seedlings still in the nurseries.

Cupressus torulosa.

44. Four hundred and eighty-five young trees were planted out, but all, except 100, were destroyed by the fire. This species does better than any other at Bernardmyo, and measures are being taken to extend its cultivation. The plants that were not burnt are from 1 to 3 feet high. There is a large supply of young seedlings in the nurseries.

Eucalpytus.

45. With one or two exceptions the whole of the *Eucalyptus* trees planted out at Bernardmyo have been killed by frost which was unusually severe this winter. Those that survived are, however, healthy. At Mogôk the young trees have also suffered from frost, only 31 globulus trees surviving out of 200 planted out. Additional sowings have been made both at Bernardmyo and Mogôk, which have resulted in a large number of young plants, which will be put out on high ground where they will be less liable to damage.

Olea cuspidata.

46. Five plants of this species have been put out at Mogôk. They are growing very slowly, but appear healthy..

Himalayan oaks.

47. Twenty-one plants of *Quercus incana* were raised. *Quercus annulata* and *Quercus delalata* failed to germinate.

Acacia melanoxylon.

48.. Some sowings were made of *Acacia melanoxylon,* but all the young plants were killed off by frost.

Cost of experimental plantation at Bernardmyo and Mogôk.

49. The total cost of the experiments was Rs. 3,260.

Eucalyptus in the Mandalay division and Shan States.

50. Two hundred plants raised from seed sown last year have been put out at Maymyo and are doing well. Further sowings have been made and there is a very large stock of seedlings on hand, which will be planted out this rains. The amount expended at Maymyo was Rs. 90. The sowings in the Shan States have been a failure, but the experiment is being repeated at Fort Stedman under the superintendence of Mr. Jackson.

(*f*) *Communications and Buildings.*

Roads.

51. A sum of Rs. 261 was spent on repairing the approaches to the offices in the Bhamo, Katha, Mandalay, and Mu divisions.

Buildings. Original works.

52. The Katha Forest office and bungalow was nearly completed before the close of the year, the amount expended being Rs. 3,865, and a kitchen, costing Rs. 116, was added to the Tigyaing bungalow. In the Mandalay division Rs. 165 were spent in digging a well. The conversion of the Minbu bungalow and office into a permanent structure was completed at a cost of Rs. 1,829, the mat walls of the office being replaced by masonry ones and a ceiling added to the rooms upstairs. A depôt house was built at Minhla at a cost of Rs. 117. In the Mu division the officers' quarters and office were completed, Rs. 1,812 being spent during the year under report; a well was also sunk at a cost of Rs. 150. In the Yaw division a sum of Rs. 113, outstanding on the original cost of the bungalow, was paid to the Public Works Department. The total cost of original works amounted to Rs. 8,167.

Repairs.

53. Rupees 2,214 were spent in all divisions during the year on repairs to offices, guard-houses, and fences.

CHAPTER IV.

YIELD AND WORKING.

(a) *Girdling.*

Girdling, general.

54. The following girdling operations were sanctioned during the year: for Messrs. The Bombay Burma Trading Corporation, Limited, 40,000 trees in the Chindwin, Mandalay, Mu, and Pyinmana divisions subject to such modifications as experience might show to be necessary; for Hadji Mahomed Hady 10,000 trees in the Mogaung forests of the Bhamo division; for Mr. Darwood and U Kawi 2,000 trees in the Upper Zawgyi forests of the Mandalay division, altogether 52,000 trees.

The actual quantities girdled were—

	Trees.
For Bombay Burma Trading Corporation, Limited—	
Chindwin division	20,247
Mandalay division	295
Mu division	673
Pyinmana division	...
Yaw division	742
Total ...	21,957
For Hadji Mahomed Hady in the Mogaung forests ...	1,300
For Mr. Darwood and U Kawi ...	...
Total girdled ...	23,257

Girdling in the Chindwin and Yaw divisions.

55. In the Chindwin two girdling parties were at work under Messrs. Slade and Thompson. Mr. Slade commenced work at Ahlaw in the Upper Chindwin on the 9th December and continued uninterruptedly till the 1st February, when operations were transferred to the Wesalun and Wesalaung chaungs. At the end of February Mr. Slade returned to Kindat for settlement duty, Mr. Forteath taking over the girdling. On the 6th March work had to be closed owing to the disturbed condition of the country, but was resumed a fortnight later in the Mawku forest near Kindat, where it was carried on till the end of the season. The number of trees girdled in the Upper Chindwin was 15,042.

The second party under Mr. Thompson left headquarters towards the end of November and commenced work in the Upper Myittha river. Timber proved to be very scarce; only 1,500 trees had been obtained by the end of January when, owing to the unsettled state of the Chin country, Mr. Thompson was ordered to stop work in the Myittha valley. He then proceeded to the North Yama forest, in which 3,701 trees were obtained. Mr. Thompson was by that time (17th March) so ill that he was forced to return to headquarters and girdling was interrupted until the 6th April, when work was again started in the Thinkadôn forest. This tract is almost denuded of large timber and only yielded 113 trees. He then crossed over to the Upper Kyaw valley in the Yaw division, where he continued at work till the middle of May. The total number of trees girdled by Mr. Thompson was:

	Trees.
Chindwin division	5,205
Yaw division	742
Total ...	5,947

In the Upper Chindwin the whole quantity proposed to be girdled was obtained. In the Lower Chindwin the amount girdled was less than half the quantity expected, the deficiency being due to the absence of trees. The girdling in the North Yama forest was inspected by the Officiating Conservator and found, with few exceptions, to have been carried out in a satisfactory manner.

Girdling in the Mandalay division.

56. In the Mandalay division work was commenced early in the season by the Divisional Officer and Mr. Dun, and the forests on the Myitngè in the Mandalay district and in Yatsauk, where the Corporation had asked for trees to be girdled, were thoroughly searched, with the result that only 295

trees were killed. These forests have been much overworked and will yield no more timber for some time to come. Towards the close of the season work was transferred to Thibaw territory, but sufficient timber was not found in any of the forests visited. The Yatsauk forests were inspected by the Officiating Conservator at the time the girdling was going on.

Girdling in the Mu division.

57. In the Mu division work was commenced by Mr. Murray in the Sinlin forest, where the Corporation stated that 1,500 trees were available; only 613 trees were girdled, the forests having been already heavily worked. The Thaw forest, which was reported to contain 2,500 trees, was next visited, but this also proved to be overworked and only 60 trees could be girdled. In the Sadwingyi forest no trees at all were girdled, all marketable trees having been already extracted. Mr. Murray then arranged to continue operations in Wuntho, but before the forest was reached the rebellion broke out and work had to be stopped and could not be resumed later on for want of escorts.

Girdling in the Pyinmana division.

58. In the Pyimnana district it was proposed to girdle 10,000 trees east of the Sittang, but on examination it was found that timber was only available in two small forests which have been hitherto untouched as they are inaccessable to elephants; no girdling was therefore done.

Girdling in the Bhamo division.

59. In the Bhamo division the lessee of the Mogaung forests applied to have trees girdled at Indawgyi and in the Uya, Hatha, and Hmangin forests, but owing to the disturbed state of the frontier girdling at Indawgyi had to be given up altogether, and escorts for the other forests were not supplied till late in the season. All the trees at present available in these latter were girdled. The lessee's claim to the Nansônti forests on the Kaukkwè river, which in Burmese times formed part of Mogaung, has since been recognized and the whole of the Kaukkwè included in his lease; this, it is hoped, will obviate the necessity of any further girdling.

Girdling for Mr. Darwood in the Zawgyi forest.

60. The girdling on the Zawgyi had to be postponed owing to the absence of water in the forest, but the work will be carried out early next cold weather.

(*b*) *Timber removed by Government agency.*

Maung Bauk's lapsed logs.

61. Owing to the insolvency of Maung Bauk, the lessee of the Upper Irrawaddy forests, all timber partially extracted by him lapsed to Government. In the Bhamo division 586 of these logs were collected and rafted to Mandalay, where they were still in stock at the close of the year. In the Katha division 753 logs were collected, of which 628, measuring 947 tons, were sold in Mandalay for Rs. 37,719; 110 are in stock at Mandalay and the remainder are at Katha.

In the Minbu division 68 logs were collected and sent to Rangoon, where they fetched Rs. 4,114. Two logs were also collected in the Yaw division, making a total of 1,409 logs brought to depôt.

Yaw timber.

62. The four logs shown as on hand at the end of last year were used for repairs to the Minbu bungalow. Twenty-five additional logs were collected, five of which were sold locally for Rs. 40 and the remainder sent to Rangoon, where they realized Rs. 1,209.

Other sales.

63. Rupees 13,548 were realized by the sale of 2,631 logs of Government timber including lapsed drift logs at the various depôts. Rupees 621 were outstanding at the close of the year.

(*c*) *Timber removed by licensees.*

Arrangements made for working forests lately held by Maung Bauk.

64. Arrangements are being made with Mr. Darwood for working out the remaining girdled trees and neaped logs in the principal forests on the Shweli river. The forests on the Kaukkwè were transferred to Hadji Mahomed Hady on similar terms to those on which he holds the Mogaung forests, except as re-

gards neaped timber, for which Maung Bauk's rates are to be paid. For the remaining forests no contracts have as yet been concluded. The sum of Rs. 1,57,731, due by Maung Bauk on account of short outturn during 1889, must be regarded as irrecoverable.

Surrender of the Taungdwingyi forests.

65. The Bombay Burma Trading Corporation, Limited, have given notice that they will surrender their lease of the Taungdwingyi forest on the 31st December 1892.

Pyaungshu boundary.

66. An enquiry was ordered to be held by the Commissioner, Northern Division, and the Superintendent of the Northern Shan States regarding the boundaries of the Pyaungshu forest held by the Corporation, but the question had not been settled at the close of the year.

Permission to Shan Sawbwas to work forests.

67. Permission was granted by the local Government to the Sawbwas of Maukmè, Maingpan, and Mobyè, and to the Thatôn Myoza to work out the old girdled timber in their respective States on payment of Rs. 200 a year for each elephant employed. No revenue has as yet been received. The permission granted to the Myoza of Thatôn was subsequently cancelled for allowing green teak to be cut.

Outturn of forests worked by licensees.

68. The following statement shows the outturn of the various forests worked by licensees during the financial year. It includes 518 logs measuring 488 tons sold to the Public Works Department for local use:—

Licensees.	Forests.		Teak logs.	Teak tons.
Bombay Burma Trading Corporation, Limited.	Pyinmana	Full sized	49,680	66,397
		Under-sized	21,166	18,988
	Chindwin	Full-sized	14,983	18,209
		Under-sized	4,529	2,820
	Mu	Full-sized	4,144	4,881
		Under-sized	818	566
	Theingôn	Full-sized	1,917	2,369
		Under-sized	735	485
	Pyaungshu	Full-sized	763	1,001
		Under-sized	134	96
	Taungdwingyi	Full-sized	825	900
		Under-sized	279	188
	Total Bombay Burma Trading Corporation, Limited		99,878	1,11,844
Hadji Mahomed Hady.	Mogaung	Full-sized	3,153	3,531
		Under-sized	1,741	1,070
	Total Hadji Mahomed Hady		4,894	4,601
Messrs. Darwood and U Kawi.	Hlaingdet	Full-sized	873	1,061
		Under-sized	173	128
	Total Messrs. Darwood and U Kawi		1,046	1,189
	GRAND TOTAL		105,818	117,634

The total amount extracted by lessees fell short of that of the previous year by 23,933 tons. Maung Bauk brought out no timber at all and the Corporation 19,721 tons less than last year. More than the minimum quantity stipulated for in the leases was extracted from all forests except Maung Bauk's.

69. The outturn from the Chindwin and Pyinmana divisions was distributed among the different forests as follows:—

Outturn of forests in Chindwin and Pyinmana.

		Logs.
Chindwin ...	Yama chaung	171
	Thingadôu	186
	Taungdwin	2,799
	Patolôn	4,285
	Myittha river	4,081
	Nantabin, Paluswa, Nansalein	1,760
	Mawlaikgyi chaung	429
	Mawku chaung	680
	Makat and Kenaw	218
	Yu chaung	8,971
	Kodan	174
	Nankamu	801
	Various Kindat streams	295
	Neaped logs of previous year (various forests)	117
	Total ...	19,462
Pyinmana ...	Yeni	7,009
	Minbyin	14,872
	Yônbin	10,196
	Palwe	8,097
	Kaing	2,284
	Yanaungmyin	1,189
	Ngalaik	9,745
	Taungnyo	5,589
	Pozaungtaung	2,215
	Sinthe	6,781
	Paunglaung	2,919
	Total ...	70,796

(*d*) *Removal of timber and produce by local purchasers.*

(*1*) *Timber.*

70. The outturn of timber brought to revenue stations for local consumption is given below:—

Division.	Teak.	Other reserved wood.	Unreserved woods.	Firewood brought to Mandalay.	Charcoal.	Revenue.
	Tons.	Tons.	Tons.	Tons.	Tons.	Rs.
Bhamo	2,238	...	274	...	195	7,089
Chindwin	628	78	4,784	...	24	8,090
Katha	458	58	120	...	88	1,506
Mandalay	31,756	270	5,069	30,204	3,296	1,30,669
Minbu	5	...	35	...	802	265
Mu	1,483	6	143	7	18	5,088
Pyinmana	2,949	20	8,498	...	172	29,739
Yaw	7	...	...	...	...	64
Duty on timber exported to Lower Burma.	...	...	...	...	...	16,232
Payments made by licensees ...	...	...	...	...	...	11,19,819
Total ...	39,464	432	18,918	30,211	4,590	13,18,556

There was an increase in the consumption of all woods except reserved trees other than teak which is always a small item; the amount of unreserved timber used was more than double that of the previous year and the total revenue from timber used locally shows an increase of 20 per cent.

The amount paid by licensees includes Rs. 8,256 paid by Hadji Mahomed Hady on account of short outturn from the Mogaung forests during 1889. It also includes an excess payment of Rs. 8,569 which has since been refunded. No fine was exacted from the Bombay Burma Trading Corporation for the short outturn from the Theingôn forest mentioned in paragraph 76 of last year's report, the rainfall in the Myittha-Panlaung valley having been deficient.

(2) *Minor Forest Produce.*

Outturn in minor forest produce.

71. The revenue from minor forest produce and bamboos continues to show a steady increase, the total amount collected being Rs. 2,29,449 or Rs. 62,335 more than last year. The principal increase was under cutch and rubber; details are given below.

Division.	Bamboos.	Canes.	Cutch.	India-rubber.	Wood-oil and black varnish.	Resin and dammer.	Lac.	Honey and wax.	Lime.	Shaw fibre.	Bark.	Cinnamon.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bhamo	704	343	...	1,04,497	14	20	...	...	...	...	...	...	...	1,05,578
Chindwin ...	10,478	2,404	120	4,170	456	32	...	368	...	...	...	...	...	18,037
Katha	76	6	1,260	...	204	18	...	2	...	28	...	...	259	1,853
Mandalay ...	17,340	466	2,320	...	146	...	...	16	230	22	...	...	...	20,549
Minbu	124	9	28,745	2	90	8	2	4	34	152	342	10	...	29,522
Mu	3,158	35	6,300	...	1,300	290	...	...	14	18	...	...	...	11,175
Pyinmana ...	407	113	23,120	...	516	...	...	12	...	40	...	...	...	24,208
Yaw	...	1	18,480	...	...	...	...	...	...	...	...	...	...	18,481
Total ...	32,296	3,377	80,405	1,08,678	2,726	368	2	402	278	260	342	10	259	2,29,403

Add—		
Wrongly credited under IIc, Charcoal licenses, Katha ...	30	
Wrongly credited under IIc, India-rubber licenses, Chindwin ...	50	80
		2,29,483
Deduct—		
Wrongly credited to Vc, Bhamo division { Wood-oil	14	
Wrongly credited to Vc, Bhamo division { Dammer	20	34
Total IIc and IIe (Form 58) ...		2,29,449

(e) *Free Grants.*

Timber granted free of duty.

72. Revenue was remitted on 30 tons of timber used for repairing a kyaung at Ye-u in the Mu division. In the Pyinmana division the villagers of Mindan were granted 7 tons of unreserved timber for a zayat, and duty was remitted on 11 tons of small teak extracted by the Rev. Mr. Huysman of Yamèthin and on 29 tons of teak presented by the Bombay Burma Trading Corporation, Limited, to the Rev. Mr. Cochrane of Pyinmana for building a school.

Timber not brought to revenue station.

73. In addition to the above large quantities of teak and other timber were used free of duty by the inhabitants of villages in the neighbourhood of the forests. The quantity of teak timber thus used for private purposes is not very great and consists mostly of small posts, but in almost every district new kyaungs are being built, or the old ones repaired, and very large quantities of teak have been used on these works.

(f) *Summary of Outturn.*

74. The following table shows the quantity of timber brought to revenue stations and the value of minor produce for which licenses were issued :—

How extracted.	Teak.	Other reserved wood.	Unreserved wood.	Firewood and charcoal.	Total.	Value of minor produce.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	Rs.
By Government agency ...	174,851	...	284	...	174,635	...
,, licensees	5,881,744	.	...	...	5,881,744	...
,, local purchasers	1,977,560	21,601	945,980	1,740,058	4,685,199	2,29,449
,, free grants	2,000	...	368	...	2,368	.
Total ...	8,035,655	21,601	946,632	1,740,058	10,743,946	2,29,449

(g) *Drift, Waif, and Confiscated Forest produce.*

Drift operations.

75. At the commencement of the year there were 2,012 logs in hand at the various depôts, 6,635 logs were salved and brought to depôts making a total of 8,647, of this 2,519 were returned to owners, 2,389 were transferred to Government, 1,113 drifted away, and the remaining 2,626 were under enquiry as to ownership at the close of the year. The revenue from drift timber amounted to Rs. 16,413 and the cost of the operation to Rs. 15,385. The latter includes the cost of the steam-launch establishment, which amounted to Rs. 5,145. Most of the timber that went adrift was in the Minbu division. The river rose to an exceptional height and the banks at Zigat broke away together with the timber that was tied to them. It is believed that most of the timber that drifted away was subsequentely recovered.

Wuntho Sawbwa's timber confiscated.

76. Some 7,855 logs and 875 pieces of scantling belonging to the Wuntho Sawbwa in the Mu division and 217 logs in the Katha division were seized on the outbreak of the rebellion, but some of these were subsequently claimed by persons who alleged that they had purchased them from the Sawbwa; such logs are being dealt with under Chapter VII of the Upper Burma Forest Regulation. None of the logs seized were disposed of before the end of the year.

(h) *Exports.*

77. The exports of converted teak timber to Lower Burma were as follows:

	Tons.
Exported from Mandalay (scantling and planks)	407
Exported from Yaw (scantling and planks)	21
Exported from Minbu (scantling and planks)	25
Exported from Minbu (byats)	45
Exported from Pyinmana (byats)	230
Total ...	728

The total revenue realized was Rs. 16,233, or Rs. 1,611 less than last year. The exports show a falling-off of 577 tons due to the enhanced rate of duty.

CHAPTER V.

FINANCIAL RESULTS.

General results.

78. The usual statement showing the revenue and expenditure of the year compared with that of the previous years is given below:

Year.	Revenue.	Expenditure.		Surplus.
	Rs.	Rs.	Rs.	Rs.
1886-87 ...	1,08,074		2,188	1,05,886
1887-88 ...	2,96,876	A 44,218 B 76,934	1,21,152	1,75,724
1888-89 ...	15,79,928	A 6,33,910 B 1,51,219	7,85,129	7,94,799
1889-90 ...	18,06,069	A 86,394 B 187,405	2,73,799	15,32,270
1890-91 ...	16,44,297	A 87,191 B 2,15,124	3,02,315	13,41,982

The revenue includes an overpayment by Hadji Mahomed Hady of Rs. 8,569, which was subsequently refunded, the true surplus was therefore Rs. 13,33,413.

Explanation of receipts.

79. The receipts on account of timber worked out by Government agency show an increase of Rs. 54,832 chiefly due to the sale of Maung Bauk's lapsed logs, which were collected and brought to depôt by Government. Payments made by licensees were Rs. 3,22,700 less than those of the previous year due to 24,199 tons less timber being extracted and to smaller sums being paid on account of shortage.

The revenue on timber used locally was Rs. 31,520 in excess of the previous year. The duty on converted timber taken to Lower Burma shows a small decrease of Rs. 1,612, the enhanced rates having restricted exports. The revenue from firewood and charcoal and from bamboos has continued to increase and that from minor forest produce shows an improvement of Rs. 58,465, the increase being under all items, but principally cutch and rubber. Receipts from drift increased by Rs. 4,372 and miscellaneous revenue by Rs. 6,112.

Explanation of disbursements under A.

80. The total expenditure under A, "Conserwancy and Works," was very little in excess of that of the previous year. Under A I there was an increase of Rs. 3,365 due to the collection of Maung Bauk's lapsed logs. A II shows a decrease of Rs. 2,937 owing to fewer trees having been girdled; drift operations cost Rs. 3,475 more than last year; the Irrawaddy rose to an unusual height, and very large quantities of timber were washed away. The expenditure on live-stock, stores, tools and plant was less than last year by Rs. 3,060, fewer elephants having been purchased. Under "Communications and Buildings" there is a decrease of Rs. 6,827. The outlay on demarcation and improvement of forests includes the pay and allowances of the Forest Settlement Officer engaged on the Pyinmana reserves and exceeds that of last year by Rs. 4,766. Miscellaneous items show an increase of Rs. 2,015.

Explanation of disbursements under B.

81. The cost of establishments amounted to Rs. 1,84,106, showing an increase of Rs. 29,518, of which Rs. 13,282 comes under the head "of Superior Officers," Rs. 5,596, "Subordinate Forest Establishment" Rs. 1,795, "Office Establishments," and Rs. 10,369 "Special allowances." The strength of the establishment was increased all round and a Burma allowance sanctioned for gazetted officers. The expenditure under "Travelling allowance" decreased by Rs. 2,082 and "Contingencies" show a small increase of Rs. 282.

Financial results division by division.

82. The following table shows as nearly as can be ascertained the revenue and expenditure of each division:—

Division.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
Bhamo	2,17,134	30,902	1,86,232
Chindwin	2,30,119	45,949	1,84,170
Katha	1,36,269	47,878	88,391
Mandalay	94,495	41,280	53,215
Minbu	47,283	39,081	8,202
Mu	72,070	27,902	44,168
Pyinmana	8,05,011	44,003	7,61,008
Yaw	41,826	25,320	16,506
Direction	90	...	90
Total ...	16,44,297	3,02,315	13,41,982

CHAPTER VI.

GENERAL REMARKS.

Services of Officers.

83. Owing to disturbances among the Kachins in Bhamo and Momeik no guards could be supplied to the officers in the Bhamo and Katha divisions till near the close of the season, and the outbreak in Wuntho brought work in the Mu division to a standstill in the middle of February. The field work turned out in these three divisions has consequently been but meagre, though the officers in charge are in no way to blame for this. In all other divisions the outturn of work has been exceptionally good and the Officiating Conservator has much satisfaction in acknowledging the zealous and efficient manner in which Divisional Officers generally and their assistants have discharged their duties. As a special report on each gazetted officer is submitted annually it has not been considered necessary to enter here a detailed record of their services.

84. Although the year has been an unusually healthy one, the majority of officers have suffered more or less from the exposure and hardship inseparable from a long season's work in a country where nearly all the ordinary conveniences of Indian camp life have to be dispensed with.

Health of officers.

85. The subordinate forest and depôt establishment still leaves much to be desired. It was difficult to get together a sufficient number of suitable men in the first instance and it has been found necessary to weed out from time to time those who have proved incompetent or dishonest.

Subordinate Forest and deôpt establishment.

86. In the Mandalay division one clerk was dismissed on being convicted of embezzling money, and a clerk in the Yaw division was removed for incompetency, otherwise Divisional Officers report favourably on their office establishments. The Conservator's office has been satisfactorily superintended by Mr. Johnson, who returned from eight months' furlough on the 4th June 1890, the work being efficiently carried on during his absence by Mr. Stephens, who officiated for him.

Office establishment.

87. On her return from the Chindwin expedition the launch *Ranger* was repaired and retransferred to the Forest Department on the 14th August 1890 and was employed on drift and revenue work in the Bhamo and Katha divisions for the remainder of the year. The *Dacoit*, which has been temporarily transferred to the Forest Department to replace the *Ranger*, was returned on the 21st July 1890, up to which date she was used in the Katha division on revenue work. The launch *Thumala* was employed in the Minbu, Yaw, and Chindwin divisions during the rains, June to November, on drift work and during the remainder of the year was attached to the Mandalay division for revenue work.

Steam launches.

88. Including a calf born in Pyinmana 16 additional elephants were brought on the stock list during the year. Ten of these were purchased for Rs. 12,126 and two animals, valued at Rs. 2,800, were received from the Political Officer, Haka. Eight elephants died during the year and one animal, which had proved useless for transport purposes, was sold for Rs. 1,400. The total number of animals in the circle at the close of the year was thus increased to 42 and one calf. Efforts were made to capture the two stray animals referred to in last year's report, but without success.

Elephants.

One of the elephants provided as transport for Mr. Jackson in the Southern Shan States was lost in January. The animal is reported to have been stolen and taken into Po Bya's State and it will possibly be recovered.

89. Samples of indigenous oaks from Bernardmyo were procured at the request of Messrs. Dyer & Co., of the Burma Brewery, who wished to test their suitability for making casks. One species, *Quercus glauca*, was reported to be admirably adapted for this purpose, and two others, *2 serrata*, and *2 semiserrata*, though not quite so good, were found to be quite utilizable. All these species are believed to be fairly abundant near Bernardmyo, but the high cost of extraction is likely to prove prohibitive for the present.

Indigenous oaks for casks.

90. The Officiating Conservator left Mandalay on the 18th December and spent six weeks inspecting the Zawgyi forests and the girdling on the Myitngô. He then proceeded to the Mu forests with the view of crossing through Wuntho to the Upper Chindwin, but the outbreak in Wuntho necessitated an alteration in this programme, and after a short inspection of a portion of the Baw and Thaw forests he went *viâ* Ye-u direct to the Lower Chindwin, the remainder of the season being occupied in inspecting the girdling on the North Yama chaung and examining the forests in the Yaw division, for which a rough working plan is in course of preparation. He returned to Mandalay on the 14th May.

Conservator's tour.

MANDALAY:
The 8th July 1891.

J. W. OLIVER,
Offg. Conservator of Forests, Upper Burma Circle.

APPENDICES.

ANNUAL FORM NO. 49 [PRESCRIBED].—*Area of Reserved, Protected, and Unclassed Forests for 1890-91.*

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles	Added during the year. Acres.	Excluded or transferred to other heads. Square miles.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
			Reserved Forests.								
Katha ...	.....	Ruby Mines	Ôngaing	...	...	2,880	...	2,880	4·50	...	Shown as unclassed in last year's report.
			Bamôn	...	...	920	...	920	1·44	Notification No. 31, dated 14th February 1891.	Where the areas differ from those excluded from the unclassed forests, it is due to the latest corrected figures for areas being given.
			Mogôk	...	...	560	...	560	·87		
			Yebu	...	...	400	...	400	·62		
			Peikswè	...	...	440	...	440	·69		
			Kyenidaung	...	...	2,000	...	2,000	3·10		
			Bernardmyo	...	...	12,160	...	12,160	19·00	Notification No. 30, dated 14th February 1891.	
			Kathè	...	...	1,280	...	1,280	2·00	Notification No. 32, dated 14th February 1891.	
			Kyatpyin	...	...	1,840	...	1,840	2·87	Notification No. 33, dated 14th February 1891.	
			Total ...	...	...	22,480	...	22,480	35·09		
			Protected Forests.			square miles.					
Bhamo ...	Sinbo ...	.....	Hmangin	...	41	...	...	...	41	...	
			Nôkcho	...	...	8	...	...	8	...	Estimated.
			Mampwa	...	...	5	...	...	5	...	
			Uya-hatha	...	24	...	...	...	24	...	
			Mohnyin	...	64	...	4	...	60	...	Corrected area shown last year as Namyin.
	Mogaung ...	Bhamo	Tapaing	...	...	20	...	...	20	...	Estimated.
			Molè	...	...	15	...	...	15	...	
			Moyu	...	...	10	...	...	10	...	
			Nansin	...	...	10	...	...	10	...	
			Sinkan	...	...	50	...	...	50	...	
			Nampa	...	...	30	...	...	30	...	
			Kaukkwe	...	...	50	...	...	50	...	
			Mozit	...	...	20	...	...	20	...	
			Indawgyi	...	...	20	...	...	20	...	
			Carrried over ...	...	129	238	4	...	363		

ANNUAL FORM NO. 49 [PRESCRIBED].—*Area of Reserved, Protected, and Unclassed Forests for 1890-91*—continued.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Square miles.	Excluded or transferred to other heads. Square miles.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
			Protected Forests—continued.								
			Brought forward ...	...	129	238	4	...	363		
		Upper Chindwin ...	Uyu	...	...	900	...	...	900	...	Estimated. Includes forest shown as Henu in last year's report.
			Nanthamyit	...	...	100	...	...	100	...	Estimated.
			Sunda	...	...	400	...	...	400	...	
			Nankamu	...	...	700	...	...	700	...	
			Kodan	...	...	900	...	...	900	...	
			Mahamyaing	...	...	900	...	...	900	...	
			Upper Yu	...	...	55	...	...	55	...	Proposed Ahlaw reserve.
			Wesalaung and Wesalun ...	...	...	60	...	...	60	...	
			Proposed Yu reserve ...	...	210	...	...	...	210	...	193 square miles of this area proposed as reserve.
			Proposed Kindat reserve ...	...	149	...	...	...	149	...	132 square miles of this area proposed as reserve.
			Proposed Matu reserve ...	...	180	...	...	...	180	...	Shown as Nanpaman, Nansamin, and Pyaungbôk in last year's report.
			Proposed Kampat reserve ...	...	59	...	...	...	59	...	
			Proposed Bôn reserve ...	...	114	...	...	...	114	...	Shown as Bôn, Nansipet-Nansepauk, and Nankyin law in last year's report.
Chindwin ...	...	Lower Chindwin ...	Proposed Taungdwin reserve.	...	262	...	...	...	262	...	
			Patalôn	...	600	...	...	...	600	...	
			North Yoma	...	...	140	...	...	140	...	Estimated.
			Thingadôn	...	100	...	40	...	60	...	Reduced on further examination.
			Kabyu-Kabaing	...	...	400	...	...	400	...	Estimated.
		Pakôkku	Upper Myittha and Chawhlaw.	...	250	236	...	...	150	...	Shown as Myittha in last year's report. Area increased on further examination.
			Maw						200	...	
			Bôn						40	...	116 square miles of this area proposed as reserve
			Proposed Laungtaung reserve.						96	...	
			Proposed Kunzè reserve ...	...	125	...	...	...	125	...	
			Setkala	...	600	147	...	...	747	...	Area corrected to include Setkala and Nampan. Proposed as reserves.
			Maingtha								
			Nahan								
			Budaung								
			Thò								
			Kun								
			Magyi								
			Nampan								

Katha ...	...	Momeik	East Nampan	...	...	30	...	...	30	...	Estimated.
			Molo	...	...	10	...	...	10		
			Lwewin	...	...	28	...	...	28	...	Upper Shweli. Estimated.
			Lwekin								
			Lônsa								
			Kônmawun								
			Matataung	...	...	6	...	...	6	...	Estimated.
			Tadaunggwa	...	...	5	...	...	5		
			Nampan	...	...	50	...	...	50		
		Ruby Mines	Twinngè	...	...	5	...	...	5	...	Estimated.
			Sagadaung	...	...	30	...	...	30	...	
			Wapyudaung	...	6	14	...	...	20	...	
			Kaukgyi	...	...						
			Nyaungtauk	...	5	...	...	...	5	...	
		Katha	Pôngôu	...	...	10	...	...	10	...	
			Naunglôn								
			Shadaw								
			Kyanhnyat	...	...	5	...	...	5	...	
			Kônbaung	...	...	20	...	...	20	...	
			Hintha	...	...	4	...	...	4	...	
			Taukta and Kogyi ...	...	...	10	...	...	10	...	
			Zibin	...	...	5	...	...	5	...	
			Petsutauktaw	...	74	...	...	...	74	...	
			Mawhun	...	42	...	...	...	42	...	
			Mezachaung								
			Taungchaung	...	336	...	...	...	336	...	
			Thèchaung								
			North Kelat	...	...	8	...	...	8	...	Shown as Kyayatta in last year's report.
			Wamichaung	...	...	12	...	...	12		
Mandalay ...	.....	Yamèthin and Meiktila.	Myittha	...	200	...	...	...	200	...	
		Kyankzè and Yatsauk	Panlaung	...	250	...	...	...	250	...	
		Baw and Yatsauk ...	Zawgyi	...	100	...	80	...	20	...	Estimated area under teak.
		Mandalay and Thibaw-Thônzè.	Myitngè	...	1,000	...	...	...	1,000	...	
		Yatsauk ...	Myitngè	...	...	30	...	...	30	...	Estimated area under teak.
		Mandalay ...	Madaya	...	200	...	...	...	200	...	
Minbu ...	Taungdwingyi	Magwe	Yabè	...	250	...	...	...	250	...	
			Kyaukmigyaung ...								
			Bankôn								
			Kinmuntaung ...								
			Ngamin	...	160	...	...	...	160	...	
			Sadôn								
			Yinmalè								
			Sun	...	300	...	...	...	300	...	
			Lèbu								
			Yin	...	...	170	...	...	170	...	
			Pin								
	Sidôktaya ...	Minbu ...	Môn	...	960	...	...	...	960		
			Man	...	200	...	...	...	200		
			Salin	...	...	150	...	...	150		
Mu	.....	Ye-u ...	Yabin	...	60	...	...	...	60	Notification No. 88, dated 3rd July 1889.	Proposed reserves.
			Pyaungthwè	...	70	...	...	...	70		
			Maingwun	...	60	...	...	...	60		
			Sereiktha	...	15	...	...	...	15	Notification No. 54, dated 10th April 1889.	
			Nankyitha	...	107	...	...	...	107		
			Nanbyan	...	33	...	...	...	33		
			Tinwa	...	24	...	...	...	24	...	
			Nabe	...	13	...	...	...	13	...	
			Wabo	...	16	...	...	...	16	...	
	.....	Wuntho . .	Kalawpa	...	8	...	...	...	8	...	
			Namaw	...	16	...	...	...	16	...	
			Namma	...	32	...	...	...	32	...	
			Nanyônga	...	...	20	...	...	20	...	Area estimated.
			Khansa	...	26	...	...	...	26	...	
			Inga	...	23	...	...	...	23	...	
			Laga	...	...	80	...	...	80	...	Area estimated.
			Tagyaing	...	...	60	...	...	60		
			Carried over ...	...	7,366	5,938	124	...	13,180		

ANNUAL FORM NO. 49 [PRESCRIBED].—*Area of Reserved, Protected, and Unclassed Forests for 1890-91*—concluded.

Division.	Range.	Civil district or territory.	Name of forest.	Area on April 1890. Acres.	Area on April 1890. Equivalent in square miles.	Added during the year. Square miles.	Excluded or transferred to other heads. Square miles.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
				Protected Forests—concluded.							
			Brought forward ...		7,366	5,938	124	...	13,180		
Mu—*concld.*	.....	Katha ...	Sinlin	...	48	...	...	...	48	...	
			Daungyo								
			Thaw	...	60	111	...	...	171		
	.....	Shwebo ...	Hnetpyittaung or Sadwingyi	Unknown	...	30	...	...	30	...	
			Baw	...	...	90	...	...	90	...	This forest was not shown in last year's Form No. 49.
Pyinmana	Lèwè ...	Pyinmana	Yeni	...	70	...	...	...	70	Notification No. 150, dated 12th November 1888.	Proposed reserves.
			Myinbyin	...	170	...	...	...	170		
			Yônbin	...	125	...	...	...	125		
			Yanaungmyin	...	15	...	...	...	15	Notification No. 136, dated 17th September 1889.	
			Kaing	...	45	...	...	...	45		
			Palwe	...	100	...	...	...	100		
			Ngalaik	...	140	...	...	...	140	Notification No 150, dated 12th November 1888.	
	Taungnyo ...	Ditto	Taungnyo	...	85	...	...	...	85		
			Pozaungtaung	...	60	...	...	...	80	...	
			Paunglaung	...	200	...	...	...	200	...	
			Sinthe	...	Unknown	75	...	...	75	...	
			Myohla	...	20	...	...	...	20	...	
	Yamèthin ...	Yamèthin	Shwemindin	...	20	...	...	...	20	...	
			Kyinzu	...	20	...	...	...	20	...	
Yaw	Kyaw	Pakôkku	Kyaw	96,000	150	200	...	224,000	350	...	Increased, owing to further knowledge of forest.
	Yaw	Pakôkku	Yaw	256,000	400	...	...	256,000	400	...	
		Thaton	Pun	...	...	80	...	...	80	...	
Shan States	.....	Maukmi ...	Pun	...	...	20	...	...	20	...	
			Kadugyi	...	...	40	...	...	40	...	
			Sein	...	...	15	...	...	15	...	
			West Salween	...	...	8	...	...	8	...	
			East Salween	...	...	50	...	...	50	...	
	..	Maingpan ...	Nampan	...	...	10	...	...	10	...	
			Hwehôn	...	...	13	...	...	13	...	
			West Salween	...	...	12	...	...	12	...	
			East Salween	...	...	150	...	...	150	...	
	.....	Kaingtaung ...	Seim	...	...	70	...	...	70	...	
			Nakai	...	...	18	...	...	18	...	
			Hwelong	...	...	12	...	...	12	...	
			Small streams on west bank of Salween.	...	...	26	...	...	26	...	
			Mepa	...	...	8	...	...	8	...	
			Hwèyè	...	...	18	...	...	18	...	
			Small streams on east bank of Salween.	...	...	30	...	...	30	...	
			Total ...	...	9,114	7,024	124	...	16,014	...	
				Unclassed Forest.							
Katha ...	.....	Ruby Mines ...	Shwe-u-daung	...	...	35	...	...	35		Oak and chestnut.

ANNUAL FORM NO. 50 [PRESCRIBED].—*Register of Breaches of Forest Rules during the year 1890-91.*

Division.	Cases pending from 1889-90	New cases of the year. Injury to forest by fire	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases	Disposed of during the year. Convictions. Cases.	Convictions. Persons	Acquittals. Cases	Acquittals. Persons.	Total. Cases.	Total. Persons.	Cases pending at close of the year.
A Bhamo ...	...	...	12	...	2	14	14	12	16	...	...	12	16	2
A Chindwin	...	...	4	...	1	5	5	2	2	1	1	3	3	2
A Katha ...	10	3	...	...	3	6	16	2	3	10	12	12	15	4
A Mandalay	1	...	1	...	1	2	3	2	3	1	1	3	4	...
A Minbu ...	3	...	23	...	5	28	31	26	72	2	3	28	75	3
A Mu ...	...	...	2	...	1	3	3	1	4	...	...	1	4	2
A Pyinmana	2	...	2	...	4	6	8	5	14	3	6	8	20	...
A Yaw ...	11	...	19	...	...	19	30	19	19	11	11	30	30	...
Total A ...	27	3	63	...	17	83	110	69	133	28	34	97	167	13
B Bhamo ...	...	...	1	...	...	1	1	1	1	...	...	1	1	...
B Chindwin	...	...	4	...	3	7	7	7	45	...	...	7	45	...
B Katha ...	...	...	...	...	49	49	49	49	55	...	...	49	55	...
B Mandalay	...	...	...	...	13	13	13	13	13	...	...	13	13	...
B Minbu ...	...	...	8	...	1	9	9	9	36	...	...	9	36	...
B Mu ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B Pyinmana	...	...	23	...	13	36	36	36	36	...	...	36	36	...
B Yaw ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total B ...	...	...	36	...	79	115	115	115	186	...	...	115	186	
C Bhamo ...	...	...	1	...	...	1	1	...	...	...	...	...	...	...
C Mu ...	...	...	1	...	...	1	1	...	...	...	...	...	...	...
C Pyinmana	...	...	...	...	1	1	1	...	...	...	...	...	...	
Total C ...	...	...	2	...	1	3	3	...	...	...	...	...	...	...
TOTAL A ...	27	3	63	...	17	83	110	69	133	28	34	97	167	13
TOTAL B ...	...	...	36	...	79	115	115	115	186	...	...	115	186	...
TOTAL C ...	...	...	2	...	1	3	3	...	...	...	...	...	...	...
GRAND TOTAL ...	27	3	101	...	97	201	228	184	319	28	34	212	353	13

ANNUAL FORM NO. 51 [PRESCRIBED].—*Area of Forest Tracts protected from Fire during the Dry Season of 1891 (to accompany Report for 1890-91).*

Division.	Forest tract.	Year in which protection commenced.	Area actually protected up to 15th June 1890.	During dry season of 1891. Area attempted to be protected.	Failures.	Actually protected.	Cost during the season.	Remarks.
							Rs. A. P.	
Katha ...	Kathè reserve		800	1,280	...	1,280		
	Kyatpyin	1889	1,000	1,840	940	900		
	Kyindaung		300	2,000	1,180	820		
	Peikswe		400	440	200	240		
	Yèbu	1891	...	400	350	50	126 8 0	Cost consisted of pay of fire-watchers. The area dealt with, except Yèbu and Mogôk, are the same as last year, though the figures differ owing to latest correct calculations.
	Mogôk		...	560	5	555		
	Bernardmyo	1889	500	920	375	545		
	Ongaing		700	2,880	1,680	1,200		North Mogôk of last year.
Pyinmana — Pyinmana district.	Yeni	...	19,200	44,800	32,000	12,800		
	Minbyin	...	32,000	108,800	92,800	16,000		
	Yonbin	...	32,000	80,000	64,000	16,000		
	Palwe	...	19,200	64,000	54,400	9,600		
	Ngalaik	...	19,200	89,600	70,400	19,200		
	Kaing	...	12,800	28,800	22,400	6,400	*Nil.*	Parts of these forests escaped burning in 1889-90.
	Yanaungmyin	...	*Nil.*	9,600	6,400	3,200		
	Taungnyo	...	16,000	54,400	48,000	6,400		
	Pozaungtaung	...	16,000	51,200	41,600	9,600		
	Paunglaung	...	32,000	128,000	128,000	*Nil.*		
	Sinthe	...	*Nil.*	48,000	48,000	*Nil.*		
Pyinmana — Yamèthin district.	Myohla	...	...	12,800	12,800	*Nil.*	*Nil.*	
	Shwemindin	...	...	12,800	12,800			
	Kyinzu	...	...	12,800	12,800			
	Total ...	...	202,100	755,920	651,130	104,790	126 8 0	

ANNUAL FORM NO. 52 [PRESCRIBED].—*Area of Plantations for 1890-91.*

Division.	Name of plantation.	Area in acres. On 1st April 1890.	Added during the year.	Excluded during the year.	On 31st March 1891.	Receipts of the year.	Charges of the year.	Remarks.
						Rs.	Rs.	
	Plantations.							
Katha ...	Bernardmyo	2	2	1·5	2·5	...	1,695	The difference in the area on the 1st April 1890 is owing to the area of the Bernardmyo plantation and orchard being taken as ·2 and ·4 instead of 2 and 4 acres respectively in the report for last year.
	Mogôk I (cart-road)	·5	·25	...	·75	...	850	
	Mogôk II (Ingyauk)	1·5	...	...	1·5	...		
	Total ...	4·0	2·25	1·5	4·75	...	2,545	
	Nurseries, experiments, and exotics.							
	Bernardmyo	·25	...	...	·25	...	300	
	Mogôk	·11	...	...	·11	...	220	
	Maymyo	...	0·15	...	·15	...	90	
	Total ...	·36	·15	...	·51	...	610	
	Orchards.							
	Bernardmyo	4	...	...	4	...	150	
	Total ...	8·36	2·40	1·5	9·26	...	3,305	

ANNUAL FORM NO. 54.—*Outturn (in cubic feet solid) of Timber and Fuel during the year 1890-91 and Agency of Exploitation.*

Division.	Timber in the rough—Logs.					Timber in the rough—Poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total outturn.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.
I.—Reserved Forests.—Nil.																										
II.—Protected Forests.																										
Bhamo	32,148	336,283	...	...	368,431	...	18,255	...	...	18,255	...	114	...	...	114	...	...	...	...	...	...	9,750	...	...	9,750	396,550
Chindwin	7,448	200,262	...	...	207,710	...	54,635	...	...	54,635	...	24,079	...	...	24,079	...	22,357	...	...	22,357	...	1,200	...	...	1,200	309,981
Katha	90,889	16,055	...	...	115,944	...	15,510	...	...	15,510	...	...	...	...	...	...	28		...	28	...	4,400	...	...	4,400	135,882
Mandalay	19,139	1,750,099	...	...	1,769,238	...	342,448	...	...	342,448	...	5,442	...	...	5,442	...	13,534	...	...	13,534	...	1,674,998	...	...	1,674,998	3,805,660
Minbu	8,690	73,571	...	...	82,261	...	1,424	...	...	1,424	...	886	...	...	886	...	2,609	...	...	2,609	...	40,100	...	...	40,100	127,280
Mu	...	332,251	...	...	332,251	...	17,112	...	...	17,112	...	461	...	...	461	...	1,299	...	...	1,299	...	1,010	...	...	1,010	352,133
Pyinmana	4,516	4,161,552	2,140	...	4,168,208	...	23,800	216	...	24,016	...	385,403	12	...	385,415	...	19,100	...	...	19,100	...	8,600	...	...	8,600	4,605,339
Yaw	2,605	1,007,068	...	...	1,009,673	...	25	...	...	25	...	1,069	...	...	1,069	...	...	...	...	...	...	...	...	...	...	1,010,767
Direction	...	354	...	...	354	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	354
Total ...	174,635	7,877,295	2,140	...	8,054,070	...	473,209	216	...	473,425	...	417,454	12	...	417,466	...	58,927	...	...	58,927	...	1,740,058	...	...	1,740,058	10,743,946
III.—Unclassed Forests.—Nil.																										

ANNUAL FORM NO. 55.—[PRESCRIBED.]—*Statement showing Outturn of Minor Forest Produce during the year 1890-91.*

Division.	Description of produce.		PRODUCE REMOVED OR UTILIZED. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
				Rs.		Rs.		Rs.		Rs.		Rs.	
BHAMO	Bamboos	No.	...	...	195,288	704	...	...	...	...	195,288	704	12½ per cent. *ad valorem.*
	Canes	,,	...	...	274,225	343	...	...	...	...	274,225	343	
	India-rubber	Viss	...	...	208,994	1,04,497	...	...	...	...	208,994	1,04,497	Annas 8 per viss.
	Thitsi	,,	...	...	700	14	...	...	...	...	700	14	100 viss per permit.
	Dammer	,,	...	...	1,000	20	...	...	...	...	1,000	20	
CHINDWIN	Bamboos	No.	...	...	5,096,210	10,478	...	...	...	...	5,096,210	10,478	12½ per cent. *ad valorem.*
	Canes	,,	...	...	5,967,550	2,404	...	...	...	...	5,967,550	2,404	
	India-rubber	Viss	...	...	8,358	4,179	...	...	...	...	8,358	4,179	Annas 8 per viss.
	Cutch	Cauldrons	...	...	6	120	...	...	...	...	6	120	
	Thitsi	Viss	...	...	22,400	448	...	...	...	...	22,400	448	100 viss per permit.
	Resin	,,	...	...	1,600	32	...	...	...	...	1,600	32	
	Kanyin-oil	,,	...	...	400	8	...	...	...	...	400	8	
	Honey and wax	,,	...	...	1,840	368	...	...	...	...	1,840	368	10 viss per permit.
KATHA	Bamboos	No.	...	...	42,850	76	...	...	...	...	42,850	76	12½ per cent. *ad valorem.*
	Canes	,,	...	...	10,000	6	...	...	...	...	10,000	6	
	Cutch	Cauldrons	...	...	63	1,260	...	...	...	...	63	1,260	
	Thitsi	Viss	...	...	10,200	204	...	...	...	...	10,200	204	100 viss per permit.
	Honey	,,	...	...	10	2	...	...	...	...	10	2	10 viss per permit.
	Dammer	,,	...	...	900	16	...	...	...	...	900	18	100 viss per permit.
	Shaw fibre	,,	...	...	1,400	28	...	...	...	...	1,400	28	100 viss per permit.
	Miscellaneous	...	...	...	...	250	...	...	...	...	...	250	
MANDALAY	Bamboos	No.	...	...	8,200,672	17,349	...	...	...	...	8,200,672	17,349	12½ per cent. *ad valorem.*
	Canes	,,	...	...	746,262	466	...	...	...	...	746,262	466	
	Cutch	Cauldrons	...	...	116	2,320	...	...	...	...	116	2,320	
	Lime	Viss	...	...	4,600	230	...	...	...	...	4,600	230	100 viss per permit.
	Thitsi	,,	...	...	7,300	146	...	...	...	...	7,300	146	100 viss per permit.
	Honey	,,	...	...	80	16	...	...	...	...	80	16	10 viss per permit.
	Shaw fibre	,,	...	...	1,100	22	...	...	...	...	1,100	22	100 viss per permit.
MINBU	Bamboos	No.	...	...	46,500	124	...	...	...	...	46,500	124	12½ per cent. *ad valorem.*
	Canes	,,	...	...	5,000	9	...	...	...	...	5,000	9	
	Cutch	Cauldrons	...	...	1,417	28,340	...	...	...	...	1,417	28,340	
	Cutch (compensation for illicit working)		...	...	...	405	...	...	...	...	...	405	
	India-rubber	License	...	...	1	2	...	...	...	...	1	2	The product of a creeper.
	Shaw fibre	Viss	...	...	7,600	152	...	...	...	...	7,600	152	100 viss per permit.
	Honey	,,	...	...	20	4	...	...	...	...	20	4	10 viss per permit.
	Lime	,,	...	...	1,700	34	...	...	...	...	1,700	34	100 viss per permit.
	Bark	,,	...	...	17,100	342	...	...	...	...	17,100	342	
	Dammer	,,	...	...	1,300	8	...	...	...	...	1,300	8	
	Lac	,,	...	...	100	2	...	...	...	...	100	2	
	Cinnamon	License	...	...	5	10	...	...	...	...	5	10	
	Thitsi	Viss	...	...	4,500	90	...	...	...	...	4,500	90	100 viss per permit.
MU	Bamboos	No.	...	...	1,083,527	3,158	...	...	...	...	1,083,527	3,158	12½ per cent. *ad valorem.*
	Canes	,,	...	...	39,000	35	...	...	...	...	39,000	35	
	Cutch	Cauldrons	...	...	318	6,360	...	...	...	...	318	6,360	
	Thitsi	Viss	...	...	65,000	1,300	...	...	...	...	65,000	1,300	100 viss per permit.
	Shaw fibre	,,	...	...	900	18	...	...	...	...	900	18	
	Resin	,,	...	...	14,500	290	...	...	...	...	14,500	290	
	Lime	,,	...	...	700	14	...	...	...	...	700	14	
PYINMANA	Bamboos	No.	...	...	215,329	407	...	...	...	...	215,329	407	12½ per cent. *ad valorem*
	Canes	,,	...	...	1,000	113	...	...	...	...	1,000	113	
	Cutch	Cauldrons	...	...	1,156	23,120	...	...	...	...	1,156	23,120	
	Shaw fibre	Viss	...	...	2,000	40	...	...	...	...	2,000	40	100 viss per permit.
	Thitsi	,,	...	...	24,700	494	...	...	...	...	24,700	494	
	Black varnish	,,	...	...	1,100	22	...	...	...	...	1,100	22	
	Honey and wax	,,	...	...	60	12	...	...	...	...	60	12	10 viss per permit.
YAW	Canes	No.	...	...	800	1	...	...	...	...	800	1	
	Cutch	Cauldrons	...	...	891	17,820	...	...	...	...	891	17,820	
	Cutch (compensation for illicit working)		...	...	...	660	...	...	...	...	...	660	
	Total		...	...	...	2,29,403	...	...	...	...	...	2,29,403	

ANNUAL FORM NO. 56 [PRESCRIBED].—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1890-91.*

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
ACCOUNT OF GOVERNMENT TIMBER.				
In hand at commencement of the year.				
CHINDWIN—				
Teak ...	132	4,200		
Katha—				
Teak ...	449	9,447		
Mandalay—				
Teak ...	73	1,524		
Other ...	20	223		
Minbu—				
Teak ...	4	100		
Mu				
Teak ...	22	440		
Pyinmana—				
Teak logs ...	31	342		
Teak sleepers ...	48	68		
Teak scantlings ...	13	22		
Yaw—				
Teak ...	13	236	805	16,662
Received in depôt during the year.				
Teak logs (lapsed drift) ...	2,377	70,091		
Other woods (lapsed drift) ...	12	284		
Teak logs (confiscated) ...	796	14,191		
Teak logs (from Yaw forest) ...	25	1,705		
Teak logs (Maung Bauk's, lapsed to Government) ...	1,409	83,198		
Thingan logs (from Pyinmana forest) ...	2	150		
Pyingado logs (from Pyinmana forest) ...	865	64,875		
Teak logs (rejected by the Bombay Burma Trading Corporation) ...	453	4,682	5,941	239,776
Total ...	...	...	6,746	256,438
Disposals during the year.				
Teak logs (sold) ...	2,485	92,527		
Thingan logs (sold) ...	2	150		
Pyingado logs (sold) ...	865	64,875		
Teak logs (used departmentally) ...	225	7,906		
Teak logs (drifted away) ...	116	2,235	3,693	167,093
Balance in hand at the end of the year.				
Bhamo—				
Teak ...	119	3,245		
Chindwin—				
Teak ...	165	4,601		
Katha—				
Teak (lapsed drift) ...	1,057	27,332		
Katha—				
Teak (Maung Bauk's) ...	15	724		
Mandalay—				
Teak (lapsed drift, Maung Bauk's) ...				
Teak from { Bhamo 412 = 15,733; Katha 110 = 5,289 } ...	1,108	46,837		
Other woods ...	32	507		
Mu—				
Teak ...	10	200		
Pyinmana—				
Teak logs ...	477	4,858		
Teak sleepers ...	48	68		
Teak scantlings ...	13	22		
Yaw—				
Teak ...	9	351	3,053	88,745
Total ...	...	...	6,746	256,438
ACCOUNT OF DRIFT TIMBER.				
Balance at commencement of the year.				
Chindwin—				
Teak ...	3	60		
Katha—				
Teak ...	13	260		
Mandalay—				
Teak ...	40	1,478		
Minbu—				
Teak ...	238	9,520		
Mu—				
Teak ...	1,519	61,160		
Other ...	8	320		
Yaw—				
Teak ...	191	2,440	2,012	75,238
Collected during the year.				
Bhamo—				
Teak ...	405	13,517		
Chindwin—				
Teak ...	353	9,466		
Carried over ...	758	22,983	2,012	75,238

ANNUAL FORM NO. 56 [PRESCRIBED].—*Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1890-91*—concluded.

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
ACCOUNT OF DRIFT TIMBER—concluded.				
Collected during the year—concluded.				
Brought forward ...	758	22,983	2,012	75,238
Katha—				
Teak ...	1,899	54,973		
Mandalay—				
Teak ...	520	20,574		
Other woods ...	12	284		
Minbu—				
Teak ...	1,650	64,162		
Mu—				
Teak ...	1,752	70,080		
Yaw—				
Teak ...	44	3,234		
			6,635	236,290
Total ...	...	...	8,647	311,528
Made over to claimants.				
Teak logs ...	2,519	94,267		
Transferred to Government account.				
Teak logs ...	2,877	70,691		
Other logs ...	12	284		
Went adrift.				
Teak logs ...	1,112	42,880		
Other kinds ...	1	40		
			6,021	207,562
Balance at the end of the year.				
Bhamo—				
Teak ...	76	2,983		
Chindwin—				
Teak ...	29	902		
Katha—				
Teak ...	81	2,430		
Mandalay—				
Teak ...	2	60		
Minbu—				
Teak ...	94	3,760		
Mu—				
Teak ...	2,327	93,080		
Other ...	7	280		
Yaw—				
Teak ...	10	471		
			2,626	103,966
Total ...	...	...	8,647	311,528

In last year's form 10 logs were entered as other kinds. It was found that two of these logs were teak.

ANNUAL FORM NO. 57 [PRESCRIBED].—*Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1890-91.*

Description of timber and other produce.	On hand at commencement of the year.			On hand at the close of the year.			Difference in value		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
Government Account.			Rs.			Rs.	Rs.	Rs.	
Teak logs	724	16,349	5,749	2,060	88,148	32,802	27,053	...	
Teak scantlings	13	22	15	13	22	15	...	...	
Teak sleepers	48	68	68	48	68	48	...	20	
Other woods	20	223	20	32	507	32	12	...	
Total ...	805	16,662	5,852	3,053	88,745	32,897	27,045	...	

ANNUAL FORM NO. 57A. [PRESCRIBED].—*Abstract showing the Value of Live and Dead Stock for the year 1890-91.*

Description of timber and other produce.	On hand at commencement of the year.			On hand at the close of the year.			Difference in value		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.	Rs.	Rs.	
Live-stock	39	...	45,245	42	...	49,457	4,212	...	Does not include one calf born during the year.
Buildings	19	...	41,616	19	...	49,130	7,514	...	Number shows only buildings costing over Rs. 200, but the cost of all buildings is included in the value.
Dead-stock	...	...	21,077	...	...	24,732	3,655	...	The value of buildings and dead-stock is arrived at by adding value of buildings and dead-stock acquired during the year to the value of the same in the beginning of the year less 5 per cent. of the latter on account of depreciation.
Total ...	...	...	1,07,938	...	...	1,23,319	15,381	...	

ANNUAL FORM NO. 58 [PRESCRIBED].—*Summary of Revenue of the different Divisions during 1890-91.*

Budget head.	Direction.	Bhamo division.	Chindwin division.	Katha division.	Mandalay division.	Minbu division.	Mu division.	Pyinmana division.	Yaw division.	Total.
RECEIPTS.										
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(a) Timber	.....	.....	.....	37,719	.....	20,627	.....	.....	.....	58,346
(b) Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(c) Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(d) Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—										
(a) Timber	88	65,461	13,133	1,506	1,81,150	15,373	57,196	7,78,746	1,91,123	13,03,776
(b) Firewood and charcoal	.....	4	12	.....	14,509	200	11	43	.....	14,779
(c) Bamboos	.....	704	10,478	81	17,349	123	3,158	407	.....	32,300
(d) Grazing and fodder grass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Other minor produce	.....	1,04,840	7,609	1,802	3,201	29,396	8,017	23,801	18,481	1,97,149
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	.....	565	2,529	5,227	1,229	3,836	2,172	55	807	16,413
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—										
(a) Duty on foreign timber and other forest produce ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—MISCELLANEOUS—										
(a) Fines and forfeitures	.....	6	515	289	.....	96	.....	.....	20	926
(b) Refunds	.....	88	479	38	318	36	442	370	70	1,841
(c) Other sources	90	3,104	1,411	5,244	3,300	1,818	987	1,590	1,223	18,707
Total ...	178	1,74,772	36,159	51,906	2,21,056	71,507	71,983	8,05,012	2,11,724	16,44,297

CALCUTTA :
The 19th June 1891.

J. BRIDGNELL, *Chief Superintendent,*
in charge Forest Account Branch, Comptroller-General's Office.

ANNUAL FORM NO. 58 [PRESCRIBED].—*Summary of Expenditure of the different Divisions during 1890-91.*

Budegt head.	Direction.	Bhamo division.	Chindwin division.	Katha division.	Mandalay division.	Minbu division.	Mu division.	Pyinmana division.	Yaw division.	Total.
A.—CONSERVANCY AND WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—										
(a) Timber	315	1,457	.....	2,448	.....	310	.....	.....	.....	4,530
(b) Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(c) Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(d) Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS.	229	.....	5,152	45	1,946	.....	191	1,404	7	8,974
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE ...	329	1,186	667	3,561	1,923	3,788	2,186	1,075	670	15,385
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—										
(a) Duty on foreign timber and other forest produce ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—RENT OF LEASED FORESTS AND PAYMENT TO SHAREHOLDERS IN FORESTS MANAGED B GOVERNMENT.										
VI.—LIVE-STOCK, STORES, TOOLS AND PLANT—										
(a) Purchase of cattle	4,647	.....	.....	.....	.....	.....	.....	7,480	.....	12,127
(b) Feed and keep of cattle	1,472	1,628	1,504	1,087	1,577	1,013	972	1,485	1,294	12,032
(c) Purchase of stores, tools and plant	1,775	191	598	521	416	252	283	385	289	4,710
VII.—COMMUNICATIONS AND BUILDINGS—										
(a) Roads and bridges	.....	35	.....	61	95	4	72	.....	.....	268
(b) Buildings	.....	300	769	4,064	134	1,953	1,986	100	298	9,594
(c) Other works	.....	26	24	131	232	165	207	.....	.....	785
VIII.—DEMARCATION, IMPROVEMENT, AND EXTENSION OF FORESTS—										
(a) Demarcation	.....	2	.....	.....	.....	.....	.....	6,252	.....	6,254
(b) Compensation for land and rights	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(c) Surveys and working plans	611	475	1,075	69	968	939	410	966	255	5,767
(d) Sowing and planting	33	102	.....	3,227	90	.....	.....	.....	.....	3,452
(e) Protection from fire	.....	.....	.....	126	.....	.....	.....	.....	.....	126
(f) Other works	.....	.....	109	24	.....	.....	.....	.....	.....	133
IX.—MISCELLANEOUS—										
(a) Refunds	.....	.....	.....	.....	48	3	520	285	.....	848
(b) Law charges	.....	.....	.....	.....	310	.....	.....	.....	.....	310
(c) Other charges	1,143	37	24	64	592	16	.....	7	13	1,896
Total A.—Conservancy and Works ...	10,554	5,439	9,923	15,417	8,324	8,443	6,827	19,439	2,826	87,191
B.—ESTABLISHMENT.										
I.—SALARIES—										
(a) Conservators	12,000	.....	.....	.....	.....	.....	.....	.....	.....	12,000
(b) Superior officers	11,122	10,460	17,267	14,700	11,611	12,775	7,800	12,371	9,120	1,07,226
(c) Subordinate forest and depôt establishments	.....	2,062	3,653	2,784	5,491	3,738	2,260	5,288	2,303	28,179
(d) Office establishments	7,562	1,815	2,098	3,255	3,730	2,369	1,486	2,620	1,397	25,332
(e) Deputation and special allowances	1,774	1,218	1,516	1,231	1,043	1,316	658	955	658	10,369
II.—TRAVELLING ALLOWANCES—										
(a) Conservators	2,345	.....	.....	.....	.....	.....	.....	.....	.....	2,345
(b) Superior officers	576	1,664	2,999	2,619	2,775	2,780	1,751	2,093	1,303	19,480
(c) Subordinate forest and depôt establishments	.....	313	349	39	373	350	56	275	210	1,967
(d) Office establishment	435	130	409	334	474	323	84	528	141	2,858
III.—CONTINGENCIES—										
(a) Stationery	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Carriage of tents and records	67	27	107	2	44	3	2	3	22	277
(c) Rents, rates, and taxes	.....	13	.....	15	159	49	.....	20	.....	256
(d) Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(e) Official postage	471	62	68	71	160	123	62	77	52	1,146
(f) Sundries	771	223	705	242	241	266	61	58	122	2,689
Total B.—Establishments ...	37,123	18,607	29,171	25,292	26,101	24,092	14,222	25,188	15,328	2,15,124
GRAND TOTAL ...	47,677	24,046	39,093	40,709	34,425	32,535	21,049	44,627	18,154	3,02,315

CALCUTTA:
The 19th June 1891.

J. BRIDGNELL, *Chief Superintendent,*
in charge Forest Account Branch, Comptroller-General's Office.

ANNUAL FORM No. 59 [PRESCRIBED].—*Account-current for the year 1890-91.*

Dr.

		Rs. A. P.	Rs. A. P.
To Cash Balance		.....	604 10 5
„ *VIII Assessed Taxes*—			
Income-tax deductions from salaries		.....	3,791 7 3
Revenue as per Annual Summary Form No. 58		.....	16,44,297 2 10
To Service Funds—			
Civil Fund, Ordinary, Bengal		.....	.....
Civil Fund, Additional, Bengal		.....	.....
Military Fund, Bengal		.....	.....
Military Fund, Madras		.....	.....
Military Orphan Fund, Bengal		.....	.....
Uncovenanted Service Family Pension Fund, Bengal... ...		1,667 1 8	.....
Uncovenanted Service Family Pension Fund, Bombay ...		319 3 6	.....
Hindu Family Annuity Fund		.....	1,986 5 2
To Deposits		.....	.....
„ *Forest Cash Remittances (Local)*—			
Forest cheques drawn		2,90,826 8 5	.....
Inter-divisional transfers		8,034 11 9	3,07,861 4 2
To Advances recoverable		.....	1,04,585 4 10
„ Suspense		.....	2,684 11 3
To Account-current (other Governments)—			
Remittances from Government of Bengal		55 6 11	.....
Remittances from Government of Punjab		380 9 4	.....
Remittances from Government of India		68 4 0	513 4 3
To Inter-Departmental Tranfers—			
Public Works Department, Ordinary Branches		413 3 7	.....
	Rs. A. P.		
Military Department, Bengal	847 8 5	.....	.....
Military Department, Madras	252 8 11	1,100 1 4	.....
Civil Department—			
Jail	148 8 0	.....	.....
Mathematical Instrument Department	972 12 0	.....	.....
Miscellaneous	5,279 3 2	.....	.....
Survey of India Department	464 6 0	.....	.....
Police	16 0 0	6,880 13 2	8,394 2 1
Total ...		.....	20,74,918 4 3

Cr.

		Rs. A. P.	Rs. A. P.
By Expenditure as per Annual Summary Form No. 58		.....	3,02,314 12 2
„ Deposits		.....	.....
By Forest Cash Remittances (Local)—			
Remittances to treasuries		16,39,461 0 5	.....
Inter-divisional transfers		6,348 11 11	16,45,809 12 4
By Advances recoverable		.....	1,10,032 14 2
„ Suspense		.....	3,289 12 4
By Account-current (other Governments)—			
Remittances to the Government of India		.....	.....
To Inter-Departmental Transfers—			
Public Works Department, Ordinary Branches		4,776 3 0	.....
Military Department, Madras		6 0 0	.....
Civil Department		.....	.....
	Rs. A. P.		
Mathematical Instrument Department ...	3 0 0	.....	.....
Police	1,383 14 0	.....	.....
Miscellaneous	6,179 7 4	7,566 5 4	.....
Marine Department		784 13 4	13,133 5 8
By Cash Balance		.....	337 11 7
Total ...		.....	20,74,918 4 3

CALCUTTA :
The 19th June 1891.

J. BRIDGNELL, *Chief Superintendent,*
in charge Forest Account Branch, Comptroller-General's Office.

ANNUAL FORM NO. 60 [PRESCRIBED].—*Revenue received and Outstandings on account of Revenue during 1890-91.*

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Bhamo	Revenue received during 1890-91	.....	1,74,772 4 11	1,74,772 4 11	1,74,772 4 11	.....	
Chindwin		.....	36,158 10 2	36,158 10 2	36,158 10 2	.....	
Katha		.....	52,527 8 5	52,527 8 5	51,906 2 7	621 5 10	
Mandalay		1,493 5 0*	2,19,562 5 7	2,21,055 10 7	2,21,055 10 7	.....	* Outstanding as shown at the close of the year 1889-90 was Rs. 2,941-4-0, but this was reduced to Rs. 1,493-5-0 by the local Government.
Minbu		15,264 0 0	58,054 0 8	73,318 0 8	71,507 6 8	1,810 10 0	
Mu		.....	71,983 5 2	71,983 5 2	71,983 5 2	.....	
Pyinmana		1,396 14 9	8,03,614 14 1	8,05,011 12 10	8,05,011 12 10	.....	
Yaw		.....	2,11,723 10 11	2,11,723 10 11	2,11,723 10 11	.....	
Direction		.....	178 3 0	178 3 0	178 3 0	.....	
	Total ...	18,154 3 9	16,28,574 14 11	16,46,729 2 8	16,44,297 2 10	2,431 15 10	

ANNUAL FORM NO. 61 [PRESCRIBED].—*Statement of Outstandings and Liabilities on account of Contractors and Disbursers for 1890-91.*

Division.	Department debtor.			Department creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	.....	12,120 4 8	12,120 4 8	1,372 0 6	13,701 2 8	15,073 3 2	2,952 14 6	.....	
Bhamo	.....	1,879 14 0	1,879 14 0	.....	2,525 8 0	2,525 8 0	645 10 0	.....	
Chindwin	.....	20,953 14 4	20,953 14 4	2,422 1 1	24,024 13 3	26,446 14 4	5,493 0 0	.....	
Katha	.....	26,978 11 7	26,978 11 7	618 1 1	28,020 1 5	28,638 2 6	1,659 6 11	.....	
Mandalay	.....	19,387 5 5	19,387 5 5	1,545 3 3	19,389 1 8	20,934 4 11	1,546 15 6	.....	
Minbu	.....	13,516 11 10	13,516 11 10	660 4 8	13,278 8 7	13,938 13 3	422 11 7	0 10 2	
Mu	.....	4,631 13 8	4,631 13 8	3,616 10 7	2,479 14 1	6,096 8 8	1,464 11 0	.....	
Pyinmana	.....	4,698 13 0	4,698 13 0	497 13 0	6,273 12 6	6,771 9 6	2,072 12 6	.....	
Yaw	.....	417 12 4	417 12 4	77 12 4	340 0 0	417 12 4	...	.....	
Total ...	.....	1,04,585 4 10	1,04,585 4 10	10,809 14 6	1,10,032 14 2	1,20,842 12 8	16,258 2 0	0 10 2	

CALCUTTA:
The 19th June 1891.

J. BRIDGNELL, *Chief Superintendent,*
in charge Forest Account Branch, Comptroller-General's Office.

ANNUAL FORM No. 62 [PRESCRIBED].—*Financial Results of Upper Burma for the year 1890-91.*

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Bhamo	.....	1,457	2,17,134	14,432	15,013	2,17,134	30,902	
Chindwin	.....	.....	2,30,119	24,957	20,992	2,30,119	45,949	
Katha	37,719	2,763	98,550	20,856	24,259	1,36,269	47,878	
Mandalay	.....	.....	94,495	21,082	20,198	94,495	41,280	
Minbu	.....	.....	47,283	19,069	20,012	47,283	39,081	
Mu	.....	.....	72,070	13,840	14,062	72,070	27,902	
Pyinmana	.....	.....	8,05,011	19,093	24,910	8,05,011	44,003	
Yaw	20,627	310	21,199	12,380	12,630	41,826	25,320	
Direction	.....	.....	90	.....	.....	90	.....	
Total ..	58,346	4,530	15,85,951	1,45,709	1,52,076	16,44,297	3,02,315	

APPENDIX A.

Statement exhibiting the cost of Feed of Elephants of the Forest Department for the official year 1890-91 as compared with that of the Commissariat Department for the same period.

Division.	Number of elephants at the beginning of the year.	Number of elephants received during the year.	Casualties during the year.	Transferred to other divisions during the year.	Number at the close of the year.	Cost of feed.	Cost of keep, including gear, &c.	Cost of medicines.	Total expenditure during the year.	Average monthly cost per animal of the Forest Department.	Average monthly cost per animal of the Commissariat Department.	Amount paid by officers for carriage of elephants.	Value of labour in cash receipts and work performed.	Remarks.
						Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs.	
Bhamo	5	...	...	...	5	74	1,548	6	1,628	24 12 1	113 5 3	92	1,563	
Chindwin	6	2	1	...	7	47	1,456	1	1,504			112	2,737	
Katha	4	2	1	...	5	32	1,051	4	1,087			72	1,330	
Mandalay	5	2	1	2*	4	31	1,535	11	1,577			56	392	* Includes one elephant sold.
Minbu	3	2	1	...	4	81	893	39	1,013			148	928	
Mu	3	...	...	...	3	...	972	...	972			232	237	
Pyinmana	7	4	2	2	7†	26	1,453	9	1,485			149	363	† Does not include one calf born during the year.
Yaw	3	...	...	...	3	261	1,017	16	1,294			115	518	
Direction	3	1	2	...	2	112	1,351	9	1,472			84	168	
Shan States	...	2	...	...	2									
Total ...	39	15	8	4	42	661	11,276	95	12,032	24 12 1	113 5 3	1,060	8,235	

APPENDIX B.

List of Buildings in the several Divisions exceeding Rs. 200 in value in the Upper Burma Forest Circle.

Division.	Number.	Name of building.	Station.	Rent.	Remarks.
		(a) Buildings for which rent is payable and rent.			
Bhamo	1	Combined office and dwelling	Bhamo	22	Under construction.
Chindwin	2		Kindat	5	
Katha	1		Mônywa	...	
Mandalay	1		Katha	...	
Minbu	1		Mandalay	55	
Mu	1	Dwelling	Minbu	28½	
Pyinmana	1	Combined office and dwelling	Ye-u	27	
Yaw	1		Pyinmana	22	
			Pakôkku	30	
		(b) Buildings for which no rent is paid.			
Bhamo	1	Revenue station-house	Bhamo	...	
Katha	1	Subdivisional Forest office and bungalow ...	Tugyaing	...	
	1		Bernardmyo	...	
Minbu	1	Subdivisional Forest office	Taungdwingyi	...	
Mu	1	Drift station-house	Kyaukmyaung	...	
	1	Revenue station house	Myinmu	...	
	1		Tôktalôk	...	
	1	Forest office	Ye-u	...	
Pyinmana	1	Subdivisional Forest office and bungalow	Yamèthin	...	
	1	Forest rest-house	Kôntha	...	

APPENDIX C.

Statement showing Summary of Valuation Surveys for the year 1890-91.

District.	Name of forest.	Locality.	Area in acres counted out.	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps. Full-sized.	Under-sized.	Dead teak trees.	Cutch. Above 3 feet girth.	Below 1 ft. 6 ins. or 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.			Remarks.
												BHAMO DIVISION.													
Bhamo	Setkala Yoma	Setkala chaung ...	33	7	58	310	235	11	4	5	...	...	...	...	...	...	...	...	...	...	54	...	...	...	
			11	3	11	43	33	4	2	1	...	...	...	...	...	...	...	...	...	...	9	...	...	...	
			6	2	8	8	10	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
		Pongnyet chaung ...	40	6	31	160	140	...	5	34	...	...	...	...	...	...	...	...	...	...	53	...	...	...	
			21	8	11	155	254	6	9	18	4	...	...	...	...	...	...	...	...	...	72	...	...	...	
			47	3	29	216	379	5	14	37	2	...	...	...	...	...	...	...	...	...	69	...	...	...	
		Laikpok chaung	30	22	17	16	32	23	3	...	...	...	...	...	...	...	...	...	...	...	28	...	...	...	
		Nampa chaung	22	62	15	31	...	80	10	4	...	...	...	...	...	...	...	...	...	...	67	...	...	...	
		Maisan chaung ...	54	1	1	47	...	4	...	...	...	...	...	...	...	...	...	...	...	...	30	...	...	...	
			15	19	15	14	...	52	5	3	...	...	...	...	...	...	...	...	...	...	16	...	...	...	
		Nampa chaung ...	18	9	6	36	...	29	1	2	...	...	...	...	...	...	...	...	...	...	67	...	...	...	
			10	5	15	26	...	...	1	2	...	...	...	...	...	...	...	...	...	...	26	...	...	...	
		Total ...	256½	147	217	1,062	1,083	215	51	106	6	...	...	...	...	...	...	...	...	...	513	...	...	...	
		Average per acre ...	...	·56	·84	4·10	4·20	·83	·20	·41	...	...	...	...	...	...	...	...	...	...	1·98	...	...	...	
Bhamo	Indawgyi ...	.....	26	203	234	283	56	...	...	...	...	...	...	...	...	...	9	...	...	...	7	...	...	...	
		Total ...	26	203	234	283	56	...	...	...	...	...	...	...	...	...	9	...	...	...	7	...	...	...	
		Average per acre ...	...	7·8	9	10·8	2·1	...	...	...	...	...	...	...	...	...	·3	...	...	...	·2	...	...	...	
												CHINDWIN DIVISION.													
Chindwin	Yontin chaung. Yontin chaung	.....	18	76	40	23	69	17	...	...	...	32	...	..	...	...	...	...	...	...	9	...	...	...	Sound and unsound trees of classes below (I) not distinguished.
			46	80	76	45	45	17	...	...	...	16	...	...	...	...	...	...	...	...	24	...	...	...	
	Kalun chaung	.....	17	49	59	35	47	12	...	...	...	5	...	...	...	...	...	...	...	...	6	...	...	...	
		Total ...	81	205	175	103	161	46	...	...	...	53	...	...	...	...	...	...	...	...	39	...	...	...	
		Average per acre ...	...	2·53	2·16	1·27	2·00	0·57	...	...	...	0·65	...	...	...	...	...	...	...	...	0·48	...	...	...	
	Wessinu-chaung. West bank ...	.....	74	168	128	91	144	9	7	1	...	46	...	...	...	...	...	...	...	...	32	...	...	...	
	South bank ...	.....	24	103	56	20	38	2	5	1	...	...	...	...	...	...	...	...	...	...	6	...	...	...	
			54	122	76	108	171	4	3	3	...	24	1	2	...	...	...	...	...	...	14	...	...	...	
	Along D.P.W. road.	.....	85	200	183	123	215	9	5	5	3	3	...	...	...	...	...	...	...	...	14	...	...	...	
		Total ...	238	593	445	342	568	24	20	10	3	73	1	2	...	...	...	...	...	...	66	...	...	...	
		Average per acre ...	...	2·50	1·83	1·43	2·38	0·10	0·08	0·04	0·01	0·30	...	...	...	...	...	...	...	...	2·77	...	...	...	

Upper Chindwin	Wesiaung chaung.	Main stream ...	.....	45	39	32	13	33	3	2	...	...	7	...	...	...	...	...	...	...	...	2	...	...	...	With a few exceptions the trees girdled are not those girdled by Government which have not generally been included.
		South bank ..	.....	25	22	6	3	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		West bank ...	.....	24	32	19	22	48	4	1	...	...	2	...	...	...	...	...	...	...	...	6	...	...	...	
		Kyauk Kongyi chaung.	.....	36	88	37	69	42	11	2	1	...	19	...	...	...	...	...	...	...	...	12	...	...	...	
			.....	26	49	21	21	117	5	1	2	3	1	...	...	...	...	...	...	...	...	...	...	...	...	
		Sanka chaung	.....	28	74	5	9	23	5	...	...	...	13	1	...	...	...	...	...	...	...	2	...	...	...	
		Kun chaung ...	.....	37	10	7	28	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Total ...	221	314	127	165	276	29	6	3	3	42	1	...	...	...	...	...	...	...	22	...	...	...	
			Average per acre ...	...	1·42	0·57	0·75	1·26	0·13	0·03	0·01	0·01	0·19	...	...	...	...	...	...	...	...	·10	...	...	...	
	Mawku chaung.	Hepet chaung.	.....	30	102	14	10	18	5	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
			.....	28	102	5	7	7	5	...	...	...	8	...	...	...	...	...	...	...	...	3	...	...	...	
		Thida chaung.	.....	32	110	16	12	1	4	...	...	...	1	...	1	...	...	...	...	...	...	5	...	...	...	
			Total ...	90	314	35	29	26	14	...	...	...	10	...	1	...	...	...	...	...	...	8	...	...	...	
			Average per acre ...	...	3·49	0·39	0·32	0·29	0·16	...	...	...	0·11	...	0·01	...	...	...	...	...	...	·09	...	...	...	
Ganaw	Kyaw Hlaw chaung		.....	98	392	397	593	179	14	3	...	...	105	...	21	...	...	...	...	...	...	97	...	...	...	
			Total ...	98	392	397	593	179	14	3	...	...	105	...	21	...	...	...	...	...	...	97	...	...	...	
			Average per acre ...	...	4·0	4·05	6·05	1·82	0·14	0·03	...	...	1·07	...	0·43	...	...	...	...	...	...	2·02	...	...	...	
	Bon chaung.	East bank	.....	67	14	29	59	18	2	3	...	...	13	...	2	...	...	...	...	...	...	...	...	...	...	
		West bank	.....	52	147	149	224	84	5	...	...	...	16	5	2	...	...	...	...	...	...	...	...	...	...	
			Total ...	119	161	178	283	102	7	3	...	...	29	5	4	...	...	...	...	...	...	...	...	...	...	
			Average per acre ...	...	1·35	1·49	2·37	0·85	0·05	0·02	...	...	0·24	0·04	0·03	...	...	...	...	...	...	...	...	...	...	
	East chaung	East bank	Gangaw	64	61	104	156	66	4	5	6	9	16	4	...	...	1	...	171	287	...	...	...	...	...	
		West bank		64	9	9	5	8	1	1	...	...	4	...	...	...	...	...	8	17	...	...	...	...	...	
				48	66	99	146	124	1	2	3	6	10	1	...	...	...	...	68	168	...	...	...	...	...	
			Total ...	176	136	212	307	198	6	8	9	15	30	5	...	...	1	...	247	472	...	...	...	...	...	
			Average per acre ...	...	·77	1·20	1·74	1·12	·03	·04	·05	·08	17	·92	...	...	·00	...	1·40	2·68	...	...	...	...	...	
	Aung chaung.	East bank	Gangaw	34	36	26	44	36	1	1	1	...	...	...	...	...	...	...	71	186	...	...	...	...	...	
		West bank		64	55	51	60	53	2	2	...	...	15	...	...	...	...	...	116	267	...	...	...	...	...	
		East bank	Ditto	64	84	97	52	66	7	11	3	...	17	2	...	...	...	...	127	281	...	...	...	...	...	
			Ditto	64	41	103	61	74	2	9	...	...	19	1	7	...	...	...	142	305	...	...	...	...	...	
			Total ...	226	216	277	217	229	12	23	4	...	51	3	7	...	...	...	456	1,039	...	...	...	...	...	
			Average per acre ...	...	·95	1·22	·96	1·01	·05	·10	·01	...	·22	·01	·03	...	...	...	2·01	4·58	...	...	...	...	...	
	Tilin ...		West bank	48	13	12	32	79	6	4	9	3	19	...	7	...	...	...	52	124	...	...	...	...	...	In most cases the girdled teak trees counted out were those killed by the Corporation in former years.
			Total ...	48	13	21	32	79	6	4	9	3	19	...	7	...	...	...	52	124	...	...	...	...	...	
			Average per acre ...	...	0·27	0·43	0·64	1·64	0·12	0·08	0·18	0·06	0·39	...	0·14	...	...	...	1·08	2·58	...	...	...	...	...	
	Thayetchaung ...		North bank	52	2	94	124	91	...	5	2	9	3	...	16	...	...	...	86	152	...	...	...	...	...	
			Total ...	52	2	94	124	91	...	5	2	9	3	...	16	...	...	...	86	152	...	...	...	...	...	
			Average per acre ...	...	0·03	1·80	2·38	1·75	...	0·09	0·03	0·17	0·05	...	0·30	...	...	...	1·65	2·92	...	...	...	...	...	

Statement showing Summary of Valuation Surveys for the year 1890-91—continued.

District.	Name of forest.	Locality	Area in acres counted out.	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps. Full-sized.	Undersized.	Dead teak trees.	Cutch. Above 3 feet girth.	Between 1 ft. 6 ins. and 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.			Remarks.
		Chindwin division—continued.																							
Western Pagyi.	North Yamachaung.	West bank.	64	36	72	98	148	3	3	2	...	10	...	24	14	...	...	31	63	...	...	...	...	...	
			64	114	196	201	192	6	2	2	...	44	...	7	21	...	...	30	57	...	...	...	...	...	
			62	138	207	211	160	7	15	4	3	20	...	7	7	...	...	...	...	...	...	...	...	...	
			64	145	122	100	144	3	4	2	2	77	2	...	5	...	...	4	27	...	...	...	...	...	
			67	160	121	132	127	5	5	2	1	62	...	...	6	...	...	29	34	...	...	...	...	...	
			68	143	121	99	119	3	5	2	3	74	...	4	19	...	...	20	37	...	...	...	...	...	
		East bank	48	78	117	164	139	14	2	2	...	34	...	3	14	...	...	29	45	...	...	...	...	...	
			60	53	142	104	122	23	4	1	3	39	...	7	17	...	...	41	63	...	...	...	...	...	
			48	94	120	172	145	13	2	...	5	47	...	17	12	...	...	47	69	...	...	...	...	...	
		Total ...	565	971	1,218	1,281	1,296	80	42	17	17	407	2	69	115	...	...	231	394	...	...	...	...	...	
		Average per acre ...	...	1·71	2·15	2·42	2·29	0·14	0·07	0·03	0·03	0·72	0·00	0·12	0·20	...	...	0·40	0·69	...	...	...	...	...	
		Katha division.																							
	Taungyagyi ...	.....	51	...	...	5	48	...	...	15	13	...	1	...	63	...	...	...	...	...	...	...	...	...	
			...	...	...	1	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Kônyin ...	.....	...	...	...	21	40	2	5	10	5	...	...	1	69	...	...	...	...	...	...	...	...	...	
	Kyaukpauk chaung	.....	...	...	...	...	4	2	1	1	3	...	1	...	7	...	...	...	...	...	...	...	...	...	
	Hintha ...	.....	...	...	32	61	46	8	...	...	...	2	1	...	79	...	...	...	...	...	...	...	...	...	
		Total ...	51	...	32	88	149	12	6	26	21	2	3	1	218	...	...	...	...	...	...	...	...	...	
		Average per acre ...	...	...	·63	1·72	2·09	·23	·11	·50	·41	·03	·05	·02	4·27	...	...	...	...	...	...	...	...	...	
		Mandalay division.																							
Thibaw	Namtu	Right bank from the Namsein to Tahtingahu.	496	32	53	260	1,150	42	56	197	1,388	611	304	353	698	...	...	...	...	...	...	...	...	...	
		Average per acre ...	...	·1	0	0·5	2·3	0·1	0·1	0·4	2·7	1·2	·6	·7	1·4	...	...	...	...	...	...	...	...	...	
		Left bank opposite Tahtingahu.	48	6	8	60	79	5	4	37	72	10	1	3	43	...	...	...	...	...	...	...	...	...	
		Average per acre ...	...	0·1	0·2	1·2	1·7	0·1	0·1	0·8	1·5	0·2	0	0·1	0·9	...	...	...	...	...	...	...	...	...	

Yatsaak State.	Namlang ...	.....	112	13	10	26	106	7	9	22	134	16	21	16	31	...	...	...	...	...	...	...	...
		Average per acre ...	...	0·1	0·1	0·2	0·9	0·1	0·1	0·2	1·2	0·1	0·2	0·1	0·3	...	...	...	...	...	...	...	...
	Namma ...	.....	12	...	...	8	35	...	1	8	34	...	...	...	14	...	...	...	...	...	...	...	...
		Average per acre ...	...	...	...	0·7	2·9	...	...	0·7	2·8	...	...	.	1·2	...	...	...	...	...	...	...	...
	Sinbyet Nammelin		10·5 10·0	22 7	3 3	9 2	37 60	12 2	17 7	2 2	4 15	5 2	... ...	7 ...	6 1	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...
		Total ...	20·5	29	6	11	97	14	24	4	19	7	...	7	7	...	...	...	...	...	...	...	...
		Average per acre ...	...	1·4	0·3	0·5	4·7	0·7	1·1	0·2	0·1	0·3	..	0·3	0·3	...	...	...	...	...	...	...	...
	Yazawin ...	.....	24	1	5	7	40	1	2	3	2	8	2	13	26	...	...	...	...	...	...	...	...
		Average per acre ...	...	...	0·2	0·3	1·8	...	0·1	0·2	0·1	0·3	0·1	0·5	1·0	...	...	...	...	...	...	...	...
	Pyan ...	.....	18	26	18	15	23	1	1	1	3	1	...	3	4	...	...	...	...	...	...	...	...
		Average per acre ...	...	1·5	1·0	0·8	1·3	...	...	...	0·2	...	...	0·2	0·2	...	...	...	...	...	...	...	...
	Myaunga ...	.....	55	14	12	10	10	7	2	1	3	...	...	1	...	...	...	...	...	...	...	...	...
		Average per acre ...	...	0·3	0·2	0·2	0·2	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nammelaung ...	.....	455	102	240	567	2,342	56	77	123	295	117	16	37	67	...	...	...	...	...	...	...	...
		Average per acre ...	...	0·2	0·5	1·2	5·1	0·1	0·2	0·3	0·6	0·3	...	...	0·1	...	...	...	...	...	...	...	...
	Namlam	Below natural bridge ...	137	23	52	188	1,066	1	7	24	101	45	1	4	28	...	...	...	...	...	...	...	...
		Average per acre ...	...	0·1	0·4	1·4	7·8	...	...	0·2	0·8	0·3	...	...	0·2	...	...	...	...	...	...	...	...
		Above natural bridge ...	356	80	81	316	829	93	75	147	338	1	...	4	...	...	...	...	...	...	...	...	...
		Average per acre ...	...	0·2	0·2	0·9	2·3	0·3	0·2	0·4	0·9	...	...	...	...	...	...	...	...	...	...	...	...
	Thamantam ...	.....	81	3	25	104	1,373	15	24	41	176	1	3	4	14	...	...	...	...	...	...	3	2	...
		Average per acre ...	...	...	0·3	1·3	16·9	0·2	0·3	0·5	2·2	...	...	...		...	...	...	...	...	...	...	...
	Ponin ...	Namtu	58	6	12	29	178	16	26	32	123	20	3	9	...	...	...	...	...	...	...	2	...	...
		Average per acre ...	...	0·1	0·2	0·5	3·1	0·3	0·5	0·6	2·1	0·4	...	0·1	...	...	...	...	...	...	...	...	...
	Taungbyauk	Namtu	47	23	13	19	136	57	39	34	63	10	15	11	30	...	...	...	...	...	...	5	6	...
		Average per acre ...	...	0·5	0·3	0·4	2·7	1·2	0·8	0·8	1·4	0·2	0·3	0·2	0·6	...	...	...	...	...	...	0·1	0·2	...

Statement showing Summary of Valuation Surveys for the year 1890-91.

District.	Name of forest.	Locality.	Area in acres counted out.	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak. I.	II.	III.	IV.	Girdled teak. Sound.	Unsound.	Under 6 ft.	Teak stumps. Full-sized.	Undersized.	Dead teak trees.	Catch. Above 8 ft. girth.	Between 1 ft. 6 ins. and 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.			Remarks.
				MANDALAY DIVISION.																					
Thônzè	Paungaw chaung ...	Mehong chaung	156	...	...	18	177	3	3	25	154	...	1	7	123	...	...	...	...	...	...	...	...	...	
		Average per acre ...	...	...	...	0·1	1·1	...	...	0·2	1·0	...	...	...	0·8	...	...	...	...	...	...	...	...	...	
	Kelaung chaung ...	Mehong chaung	54	...	1	4	90	...	1	9	59	...	...	...	29	...	...	...	...	...	...	...	...	...	
		Average per acre ...	...	...	...	1·7	1·7	...	...	0·1	1·1	...	...	...	0·5	...	...	...	...	...	...	...	...	...	
Mandalay	Zehaung ...	.....	22·4	...	1	1	16	3	2	5	46	...	...	...	26 26	... ...	... ...	... ...	... ...	... ...	... ...	... ...	7 7	... ...	
		Average per acre ...	...	...	...	...	0·7	0·1	0·1	0·2	2·0	...	...	...	1·2	...	...	...	...	...	...	...	0·3	...	
	Satwa chaung ...	.....	9·8	...	...	...	...	...	...	...	...	...	...	...	...	10 Padauk.	...	...	...	...	...	5	30	...	
		Average per acre ...	...													1·0	...					0·5	3·1		
	Gwe chaung ...	.....	4·0	2	1	1	26	5	2	2	17	5	...	4	...	1·0 5	...	...	...	...	...	5	1·8 4	...	
		Alerage per acre ...	...	0·5	0·2	0·2	6·5	1·2	0·5	0·5	4·2	1·2	...	1·0	...	1·2	...	...	...	...	...	1·2	1·0	...	
	Dandin chaung...	.....	21·2	8	4	5	101	15	1	7	70	8	1	4	...	71	...	...	...	...	...	9	23		
		Average per acre ...	0·4	0·4	0·2	0·3	4·9	0·7	...	0·3	3·3	0·4	...	0·2	...	3·4	...	...	...	...	...	0·4	3·0	...	
	Sabagyi chaung ...	.....	23·4	10	6	9	76	5	6	8	98	7	3	16	...	35	...	...	...	...	...	6	2	...	
		Average per acre ...	...	0·4	0·3	0·4	3·3	0·2	0·3	0·3	4·2	0·3	0·1	0·7	...	1·5	...	...	...	...	...	0·3	...	...	
	Maun chaung ...	.....	99	...	...	1	23	2	1	8	32	...	...	4	...	11	...	...	...	...	...	2	3	...	
		Average per acre ...	...	...	...	0·2	4·1	0·4	0·2	1·4	5·6	...	...	0·8	...	1·8	...	...	...	...	...	0·4	0·5	...	

Momeik ...	Kinchaung ...	.....	6·0	...	...	1	50	5	2	3	59	1	...	3	...	43	...		11	...	...	1	9	...
		Average per acre ...	...	...	...	0·2	8·4	0·8	0·3	0·4	9·9	0·2	...	0·5	...	7·0	...	3·3	1·9	...	...	0·2	1·5	...
	Chaung Tha Baw...	.....	3·6	...	...	2	...	1	4	2	1	3	...	7	...	21	...	...	...	...	...	1	3	...
		Average per acre ...	...	...	...	0·6	...	0·3	1·2	0·6	0·3	0·8	...	2·0	...	6·0	...	...	...	...	...	0·3	0·8	...
	Kinchaung ...	.....	18·8	4	4	7	113	6	8	14	97	7	3	12		63	...	...	...	5	...	3	3	...
		Average per acre ...	...	0·2	0·2	0·4	6·0	0·3	0·4	0·7	5·0	0·4	0·2	0·6		3·3	...	...	...	0·3	...	0·2	0·2	...
	Ohmon chaung ...	.....	4·4	1	...	3	18	1	...	1	24	1	...	3		7	...	...	...	...	...	2	3	
		Average per acre ...	...	0·2	...	0·7	4·1	0·2	...	0·2	6·0	0·2	...	0·7		1·6	...	...	...	...	...	0·5	0·7	
Mainglon ...	Kyangin chaung ...	.....	10	3	...	8	2	3	3	5	6	...	6	10		48	...	...	...	...	...	...	...	...
		Average per acre ...	...	0·3	...	0·8	0·2	0·3	0·3	0·5	0·6	...	0·6	1		4·8	...	...	...	...	...	...	...	...
	Naugatha chaung...	.....	4·0	...	1	6	15	1	5	10	18	1	4	15		15	...	1	...	...	6	6	6	...
		Average per acre ...	...	...	0·3	1·5	3·9	0·3	1·3	2·5	4·5	0·3	1·0	3·8		3·8	...	0·3	...	...	1·5	1·5	1·5	...
																				0·9			1·5	
		Minbu Division.																						
Mimbu	Nwamadaung	Kyauko chaung to Kyaukmadin chaung.	33·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	121	450	...	...	...	...
		Kyaukmadin chaung to Kinmunchôn.	48·5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	134	795	...	...	...	...
		Kinmunchôn to Gwedauksan ...	37·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	139	246	...	...	...	...
		Lenyat chaung to Satma-o ...	43·5	2	8	32	97	...	...	...	...	...	...	...	...	3	24	26	96	320	...	...	...	...
		Kinmunchôn to Painnibin ...	22·7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	39	496	...	...	...	...
		Painnibin to Aungga ...	20·4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	44	653	...	...	...	...
		Aung-ga to Kinmunchôn ...	20·6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	46	563	...	...	...	...
		East of Ngalaingdwin ...	29·9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	170	992	...	...	...	...
		Kinmunchôn to Kywè-u ...	40·9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55	185	424	...	...	...	...
		East of Kywè-u	24·4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35	89	152	...	...	...	...
		Kywè-u to top of Nwamadaung...	41·7	6	4	20	200	...	...	2	4	...	...	...		12	22	33	142	107	...	...	...	...
		Top of Nwamadaung to Kinmunchôn.	51·4	5	17	29	166	1	1	4	40	...	...	...		3	18	28	123	183	...	...	...	...
		Kywè-u to Kyaukdan ...	38·2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38	230	344	...	...	...	...
		East of Kyaukto ...	51·6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	125	1,095	...	...	...	...
		Thauat chaung	22·5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	28	263	...	...	...	...
		East of Kyaukmadin ...	36·7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	131	956	...	...	...	...
		West of Kyauk-o	21·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	57	71	Not counted out.	...	...	...
		West Tanyaukdin	26·9	1	2	15	13	...	...	2	...	...	...	1		17	4	7	82	42	...	...	...	...
		East of Tanyaukdin	55·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	184	948	...	...	...	...
		East of Pabaing chaung ...	20·9	...	...	7	8	...	...	...	...	...	...	...		15	10	1	67	75	...	...	...	...
		Total ...	687·8	14	31	103	484	1	1	8	44	...	...	1		50	78	330	2,232	9,175	...	...	...	...
		Average per acre ...	...	·02	·04	·15	·70	·001	·001	·01	·06	...	...	·001	·07	...	·1	·4	3·2	13·3				
					·2													17·1						
	Tichaung	Pazuchaung proposed reserve, S. E.	26·6	1	4	2	1	...	...	...	...	...	...	...		3	...	4	92	200	Not counted.	...	...	...
		Pazu to Kyaungthaik ...	18·6	...	...	...	...	...	...	...	...	...	...	...		...	...	3	56	188		...	...	...
		Pangyet to Chi	48·7	...	...	3	7	...	...	...	...	...	...	...		...	...	79	558	436		...	...	...
		Total ...	93·9	1	4	5	8	...	...	...	...	...	...	...		3	...	86	706	833	...	...	...	...
		Average per acre ...		·01	·04	·05	·08								·03	...		·9	7·5	8·8				
					·2														17·3					

Statement showing Summary Valuation and Surveys for the year 1890-91—continued.

District.	Name of forests.	Locality	Area in acres counted out	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps. Full-sized.	Undersized.	Dead teak trees.	Cutch. About 3 feet girth.	Below 1 ft. 6 ins. and 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.	Pine. I	II	III	IV	Remarks.
		MINBU—continued.																									
		Chi chaung	38·6	..	...	...	...	...	...	...	...	...	...	...		15	...	33	201	373	Not counted.	...	...	...	...	...	
		North of Chi chaung	35·8	3	5	12	48	...	...	...	...	...	...	...	...	...	5	123	315	115		...	...	...	...	...	
		South of Chi chaung	10·3	21	5	6	7	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	
		Between Chi chaung and Kaw chaung.	28·0	12	3	31	68	2	4	...	...	...	...	...		22	...	21	9	...	...	...	...	...	...	...	
		Thanwè chaung to Kangyi ...	35·8	1	3	21	245	...	...	...	...	...	...	...		6	5	34	116	78	167	...	...	...	...	...	
		Kangyi to Aung	33·5	1	18	51	474	2	...	4	...	...	...	10	10	26	2	39	20	45	40	...	...	...	...	...	
		Chi chaung to Paik chaung ...	23·9	...	2	2	12	...	...	...	...	...	...	...	...	2	2	86	269	159	47	...	...	...	...	...	
		Paik chaung (North)	48·0	6	15	35	53	...	...	...	...	...	...	...	4	18	1	6	26	3	56	...	...	...	...	...	
		Paik chaung (South)	48·0	29	31	58	158	2	4	...	...	...	...	...	4	49	...	...	...	...	...	...	...	...	...	...	
		Along the Paik chaung ...	49·2	4	5	2	4	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	
		South-west from Ngatgyi ...	48·0	7	19	30	151	...	...	...	...	...	...	...	3	6	...	20	41	13	17	...	...	...	...	...	
		Between Kyein chaung and Ngat-chaung.	48·0	11	10	16	128	...	...	...	...	...	...	...	19	16	...	...	...	...	...	...	34	62	21	95	
	Mónlwedt	Down ridge, then Kyein chaung.	61·2	13	17	24	44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44	46	20	237	
		Ngat chaung (South-east) ...	36·4	18	30	30	68	...	...	...	...	...	...	...	11	9	...	...	...	...	...	...	...	...	...	...	
		Down ridge, then Ngat chaung...	98·0	28	51	61	115	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Hills east of Maw chaung ...	83·2	5	1	9	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	21	61	75	
		Myinsôk chaung to Maw chaung.	136·0	7	2	2	36	...	...	...	...	...	...	...		10	...	...	...	...	...	...	...	...	...	...	
		Maw chaung to Ngat chaung ...	56·0	11	25	79	184	...	...	...	...	...	...	...	57	40	...	49	38	116	...	...	...	...	...	...	
		Ngat chaung to Ameik ...	86·0	5	20	91	237	...	...	...	...	...	...	...	81	25	...	166	62	283	...	...	...	...	...	...	
		Hills round Sa chaung ...	86·4	1	14	96	145	...	...	...	...	...	...	...	25	30	...	...	...	...	...	...	52	96	85	510	
		Ngatgyi to Paiksôk	48·4	...	...	9	94	1	...	...	...	...	...	...	2	3	...	59	392	234	4	...	...	...	...	...	
		Kaw chaung to Kangyi ridge ...	56·0	9	18	46	161	...	...	...	...	...	...	...	3	2	...	13	23	25	57	...	61	300	618	410	
		Down Kangyi ridge to Kangyi ...	28·0	10	10	8	84	...	...	...	...	...	...	...	1	...	...	56	2	...	...	...	...	...	...	...	
		Kangyi ridge to Yinsalaw ...	20·0	5	16	44	83	...	...	...	...	...	...	...	1	2	...	12	7	7	18	...	...	...	...	...	
		Between Yin and È chaungs ...	104·0	13	4	8	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	138	149	131	644	
		Along Aung chaung	40·0	24	5	9	22	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	
		Between È and Aung chaungs ...	8·0	4	7	12	18	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	
		East of Aung chaung	90·4	35	19	54	81	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	
		Total ...	1,485·1	283	355	846	2,741	7	8	4	...	...	...	10		517	15	717	1,534	1,441	406	...	337	674	936	1,971	
		Average per acre ...	...	·1	·2	·5	1·8	·004	·005	·002	...	...	...	·006	...	3	·01	·4	1·03	·9	·27		·2	·4	·6	1·3	
					2·8				·01				·006			·3			2·5					2·6			
		Thon Gwa	157·5	25	70	125	185	8	2	2	1	12	2	10	...	...	..	...	...	...	...	...	...	...	...	...	
		Yabè chaung	100·8	2	5	5	20	...	...	...	...	1	1	11	20	...	...	...	...	...	...	...	...	...	...	...	
		Upper Yabè	151·8	48	60	85	152	10	6	...	...	22	5	23	80	13	4	...	...	...	...	8	...	...	...	...	
	Yabè	Southern Yabè	192·0	5	11	13	110	2	2		...	1	1	5	70	40	...	...	...	...	...	...	...	...	...	...	
		Yabè	54·0	25	30	75	250	2	11		...	11		17	115	35	...	...	...	...	...	2	...	...	...	...	

Magwè		Gwègyo	156·0	10	34	100	250	4	1	1	...	8	..	18	210	35	...	...	...	..	..	2	.	...	..	...
		Shagyaung	165·0	14	46	73	377	7	4	6	1	6	2	18	201	104	...	2	17	32	70	18	...	...	...	...
		Total ...	977·1	129	266	476	1,344	33	26	11	2	61	14	102	696	227	4	2	17	32	70	30	...	...	...	...
		Average per acre ...	...	·1	·2	·4	1·3	·03	·02	·01	·002	·06	·01	·1	·7	·2	·004	·002	·01	·03	·07	·03	...	...	...	...
						2·3			·1				·2			·9			·1							
	Kyawkmigaung ..	Nyaunghmaw	48·0	17	50	160	200	1	2	1	...	2	1	...	110	21	...	...	...	...	...	7	...	...	...	...
		Kokaing	10·0	6	8	14	38	2	2	2	...	1		6	34	14	3	...	...	...	...	...	...	...	...	...
		Nyaunghmaw	90·0	3	26	49	188	6	0	1	...	3	2	5	102	33	5	...	...	...	...	...	...	...	...	...
		Kyaukmigyaung	58·2	5	23	55	75	6	5	4	2	1	2	12	35	30	..	...	...	...	...	7	...	...	...	...
		Total ...	206·2	31	107	278	501	15	9	8	2	7	5	23	281	98	8	...	...	...	...	14	...	...	...	...
				·1	·5	1·3	2·4	·07	·04	·03	·009	·03	·02	·11	1·3	·4	·03	...	...	...	...	·06	...	...	...	...
		Average per acre ...				4·4				·2			·2			1·8										
	Yabe and Kyaukmigyaung.	Wuntwè	139·4	37	75	88	250	11	6	5	...	6	1	14	165	35	12	...	...	...	...	20	...	...	...	...
			...	·26	·54	·63	1·8	·08	·04	·03	...	·04	·007	·1	1·1	·2	·08	...	...	...	...	·14	...	...	...	...
		Average per acre ...				3·2				·2			·2		1	·4										
	Bangôn	Upper Bangôn	153·0	66	91	175	115	6	17	20	...	10	1	3	125	35	..	...	...	...	...	57	..	...	...	...
		Bangôn	170·0	10	39	80	189	4	1	1	...	2	2	3	90	12	5	...	...	...	...	13	...	...	...	...
		Total ...	323·0	76	130	255	304	10	18	21	...	12	3	6	215	47	5	...	...	...	...	70	...	...	...	...
		Average per acre ...		·2	·4	·8	·9	·03	·05	·6	...	·03	·009	·01	·6	·1	·01	...	...	...	...	·2	...	...	...	...
						2·4				·1			·1			·8										
	Yimale	Yimale	180·0	38	160	230	80	8	12	6	...	...	...	2	60	150	12	...	...	...	...	37	...	...	...	...
		Natkan	90·0	5	10	39	88	3	1	...	1	1	1	1	48	61	...	...	...	...	...	16	...	...	...	...
		Total ...	270·0	43	170	269	168	11	13	6	1	1	1	3	108	211	12	...	...	...	...	53	...	...	...	...
		Average per acre ...		·1	·6	·9	·4	·04	·05	·02	·003	·003	·003	·01	·4	·8	·04	...	...	...	...	·2	...	...	...	...
						2·4				·1						1·2										
	Ngamin	Lower Kyaukbya chaung ...	91·2	7	6	11	27	...	...	...	...	1	...	...	12	3	2	2	16	200	198	...	...	...	...	...
		Shweban chaung	69·6	4	10	19	166	...	...	...	...	4	3	2	27	10	14	9	61	210	114	...	...	...	...	...
		Lower Sadôn	129·6	12	15	32	53	...	...	...	...	...	...	...	12	...	5	...	5	165	137	...	...	...	...	...
		Gwegyo	118·2	3	34	88	107	3	7	5	...	...	...	6	56	60	7	3	12	..	4	10	...	...	...	...
		Pèbunsan	192·0	...	2	15	39	...	1	...	2	1	...	...	2	9	...	1	122	587	262	...	...	...	...	...
		Total ...	600·6	26	67	165	392	3	8	5	2	6	3	8	109	82	28	15	216	1,162	715	10	...	...	...	...
		Average per acre ...		·04	·11	·2	·6	·005	·01	·008	·003	·01	·005	·01	·1	·1	·04	·02	·3	2	1·2	·01	...	...	...	...
						1·1			...							·3			2·3							
	Ngamin and Yinmale.	Kyeunmyaung ...	99·6	20	60	110	125	10	8	6	...	20	...	6	75	40	...	4	25	...	19	23	...	...	...	...
		Total ...	99·6	20	60	110	125	10	8	6	...	20	...	6	75	40	...	4	25	...	19	23	...	...	...	...
		Average per acre ...		·2	·6	1·1	1·2	·1	·08	·06	...	·2	...	·06	·7	·4	...	·04	·2	...	·19	·2	...	...	...	...
						3·2				·2			·3			1·1			·3							

Statement showing Summary Valuation and Surveys for the year 1890-91—continued.

District.	Name of forest.	Locality.	Area in acres counted out.	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps. Full-sized.	Under sized.	Dead teak trees.	Cutch. About 3 ft. girth.	Between 1 ft. 6 ins. and 3 ft. girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk.	Pine. I	II	III	IV	Remarks.
				Minbu division—*continued.*																							
	Sadôn	Shweban	132·6	2	1	5	42	...	...	...	...	...	...	...	25	2	2	3	72	272	298	...	...	...	...	...	
		Shabindaung	73·2	8	16	25	4	...	...	...	...	8	...	4	40	18	2	5	43	147	177	...	...	...	...	...	
		Myaunggyi	108·0	6	16	36	112	...	...	...	...	6	7	7	53	20	11	8	44	150	150	...	...	...	...	...	
		Yoma	125·7	17	33	52	127	...	...	...	...	13	1	9	42	13	35	10	23	39	18	...	...	...	...	...	
		Aingwun chaung	94·8	16	19	31	43	...	...	...	...	7	1	...	42	8	11	8	3	13	40	...	...	...	...	...	
		Lower Aingwun	108·0	13	12	27	60	...	...	...	...	2	2	...	50	2	6	1	67	291	148	...	...	...	...	...	
		Nagyi chaung	80·0	7	14	23	55	...	...	...	...	2	1	1	34	19	2	...	8	2	22	...	...	...	...	...	
		Sadon chaung	102·6	6	21	86	118	...	...	...	...	1	4	5	45	5	5	...	11	29	76	...	...	...	...	...	
		Yoma	70·0	52	68	19	125	...	...	...	...	3	4	8	61	...	...	1	8	12	3	...	...	...	...	...	
		Mayagyi	70·8	43	87	158	202	...	...	...	...	7	8	8	62	29	6	1	10	13	29	...	...	...	...	...	
		Upper Magyi chaung	75·6	29	135	47	80	...	...	...	...	3	8	0	17	10	11	1	15	17	65	...	...	...	...	...	
		Bawdi myaung	126·6	13	28	72	99	...	...	...	...	5	0	4	51	30	...	...	9	64	122	...	...	...	...	...	
		Kobin forest	133·8	3	3	11	40	...	...	...	...	...	...	...	3	...	...	...	50	300	271	...	...	...	...	...	
		Kobin chaung	52·2	2	2	...	8	...	...	...	...	...	...	...	3	...	...	2	7	177	251	...	...	...	...	...	
		Kegwe chaung	100·8	...	3	2	37	...	...	...	...	3	1	...	1	...	1	...	257	456	541	...	...	...	...	...	
		Kyaukpyudaung	94·2	14	77	45	72	...	...	...	...	...	...	...	26	...	...	...	...	...	...	...	...	...	...	...	
		Taungkyinwa	128·4	...	...	1	11	...	...	1	1	...	...	1	..	1	1	1	58	436	568	26	...	...	...	...	
		Pyaswedaung	99·0	4	14	20	34	3	...	...	1	2	1	1	8	10	23	...	29	265	368	6	...	...	...	...	
		Total	1,776·3	235	549	667	1,269	3	...	1	2	62	38	48	563	167	116	41	714	2,683	3,147	32	...	...	...	...	
		Average per acre	...	·1	·3	·4	·7	...	...	...	...	·03	·02	·02	·3	·09	·06	02	·4	1·5	1·7						
					1·5								·1			·4			1.9								
	Sun	Sun chaung	78·6	1	7	11	36	...	...	...	...	3	...	...	5	3	...	...	166	283	145	...	...	...	...	...	
		Kyathaungdaung	147·6	24	45	56	267	...	...	...	...	1	...	..	88	66	6	10	36	123	247	...	...	...	...	...	
		Taunghla	92·4	2	15	16	201	...	...	...	...	5	...	...	32	46	1	1	46	200	119	...	...	...	...	...	
		Kanni	258·0	7	16	24	19	...	...	...	...	...	...	...	...	...	...	..	6	50	32	...	...	...	...	...	
		Moditaung	119·4	5	23	55	166	...	...	...	...	1	3	7	11	10	...	1	16	110	60	...	...	...	...	...	
		Upper Sun chaung	117·6	12	20	48	70	...	...	...	...	2	...	...	30	12	...	10	10	44	70	...	...	...	...	...	
		Sindaung	156·6	2	14	38	79	..	...	...	...	...	1	1	34	8	11	12	11	84	203	...	...	...	...	...	
		Lower Sindè	108·0	...	5	72	13	...	...	...	...	3	3	10	4	14	..	8	21	103	217	...	...	...	...	...	
		Thayetpin	182·1	...	2	5	34	...	...	...	...	..	.	..	3	11	...	2	28	307	454	114	...	...	...	..	

Statement showing Summary of Valuation Surveys for the year 1890-91—continued.

District.	Name of forest.	Locality.	Area in acres counted out.	Teak trees counted tou. Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps. Full-sized.	Undersized.	Dead teak trees.	Cutch. About 3 feet girth.	Between 1 foot 3 inches girth.	Below 1 foot 6 inches girth.	Stumps.	Padauk. I	II	III	IV	Pine. I	II	III	IV	Remarks.
		Mindu Division—*continued.*																												
Magwe.	Sun ...	Magyisan ...	183·0	4	22	69	122	4	2	4	...	2	...	35	75	52	5	...	36	234	258	24	...	...	...	...	...	...	...	
		Thamansaung ...	99·0	1	6	21	25	...	2	1	...	1	...	22	20	34	...	...	25	65	237	3	...	...	...	...	...	...	...	
		Patlèdaung ...	150·0	8	38	56	68	3	2	2	1	...	...	38	30	23	...	2	23	91	177	5	...	...	...	...	...	...	...	
		Total ...	1,692·6	66	213	471	1,100	7	6	7	1	18	7	113	333	279	23	40	426	1,694	2,219	146	...	...	...	...	...	...	...	
		Average per acre ...	...	·04	·12	·27	·64	...	...	...	...	·01	·004	·06	·2	·1	·01	·02	·2	·1	1·3	·08	...	...	...	...	...	...	...	
	Sun and Sadòn ...	Thinwinbin and Letawè ...	228·2	32	182	120	176	...	...	...	...	9	8	14	120	...	...	4	17	33	109	...	...	...	...	...	...	...	...	
		Yoma ...	123·2	15	110	132	257	...	...	...	...	17	20	5	14	17	25	15	14	10	45	...	...	...	...	...	...	...	...	
		Thigaw ...	160·2	14	57	128	67	...	...	...	...	11	9	14	30	82	...	2	55	86	186	...	...	...	...	...	...	...	...	
		Total ...	511·6	61	349	380	500	...	...	...	...	37	37	33	164	99	25	21	86	129	340	...	...	...	...	...	...	...	...	
		Per acre ...	...	·1	·6	·7	·9	...	...	...	...	·07	·07	·06	·3	·1	·04	·04	...	·2	·6	...	...	...	...	...	...	...	...	
	Kinmundaung ...	Yoma ...	109·2	47	175	140	135	6	12	3	28	3	...	4	30	150	...	...	...	...	...	26	...	...	...	...	...	...	...	
		Upper Kinmundaung ...	108·0	55	160	175	185	13	11	10	1	...	...	1	125	6	45	...	...	...	...	67	...	...	...	...	...	...	...	
		Kyaunggòn ...	135·0	60	50	200	45	12	10	4	2	...	...	1	150	60	22	...	...	...	...	68	...	...	...	...	...	...	...	
		Kinmundaung ...	215·4	...	...	...	85	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Okshitmyaung ...	150·0	7	14	25	83	...	3	1	...	1	...	...	5	...	...	...	...	...	...	25	...	...	...	...	...	...	...	
		Lower Kinmundaung ...	120·0	3	40	80	88	5	5	4	...	...	2	...	69	55	14	...	...	...	...	3	...	...	...	...	...	...	...	
		Taikpwè ...	18·0	...	9	24	85	2	1	1	...	1	1	...	46	28	1	...	...	...	...	1	...	...	...	...	...	...	...	
		Total ...	855·6	172	448	644	706	40	42	23	31	5	3	6	455	299	82	...	...	...	...	190	...	...	...	...	...	...	...	
		Average per acre ...	...	·2	·5	·7	·9	·04	·04	·02	·3	·00	·00	·00	·5	·3	·09	...	...	...	...	·2	...	...	...	...	...	...	...	
	Lèbu ...	Lèbu to Salò ...	194·7	...	2·4	...	...	...	·2	...	...	...	...	...	...	·9	...	20	54	63	98	...	...	...	...	...	...	...	...	
		Per acre ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·1	·2	·3	·5	...	...	...	...	...	...	...	...	
		Mu Division.																	·7											
Katha ..	Thaw ...	Taunegyi-Pegòn ...	74·2	44	71	34	8	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Singyaw ...	37·4	15	8	16	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31	54	61	20	...	...	...	...	
		Singyaw to Mobaung ..	50·0	34	137	129	105	...	3	4	...	...	...	...	...	...	...	...	...	...	...	19	40	20	8	...	...	...	...	
		Total ...	161·6	93	216	179	121	...	6	6	...	...	...	...	...	...	...	...	...	...	...	50	94	81	28	...	...	...	...	
		Average per acre ...	...	·5	1·3	1·1	·7	...	·03	·03	...	...	...	...	...	...	...	...	...	...	...	·3	·5	·5	·1	...	...	...	...	
Shwebo ...	Baw ...	Bawchaung Rya ...	62·2	17	45	105	64	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Balet ...	80·2	3	14	16	7	...	1	1	...	...	...	...	...	...	...	...	...	...	...	8	27	38	16	...	...	...	...	
		From Baw to Sadwin watershed	51·6	2	26	31	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	25	22	16	...	...	...	...	
		Total ...	194·0	22	85	152	88	...	1	1	...	...	...	...	...	...	...	...	...	...	...	17	52	60	32	...	...	...	...	
		Average per acre ...	...	·1	·4	·8	·4	...	·005	·005	...	...	...	...	...	...	...	...	...	...	...	·08	·2	·3	·1	...	...	...	...	
	Sadwinkyi ...	Sadwinkyi watershed to old village.	70·4	2	19	31	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	19	10	6	...	...	...	...	
		Lin ...	16·4	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	16	18	6	...	...	...	...	
		Total ...	86·8	2	19	33	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	35	28	12	...	...	...	...	
		Average per acre ...	...	·02	·2	·4	·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·2	·4	·3	·1	...	...	...	...	

Statement showing Summary of Valuation Surveys for the year 1890-91—continued.

District.	Name of forest.	Locality.	Area in acres counted out.	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak. I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps.	Dead teak trees.	Cutch. Above 3 feet girth.	Between 1 ft. 6 ins. and 3 feet girth.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk. Over 6 feet girth.	Between 6 feet girth.	Below 6 ft. girth.	Remarks.
										PYINMANA DIVISION.														
	Paunglaung	Basin of the Hnandan chaung.	41·2	27	6	3	4	9	4	1	3	8	1	...	13	...	...	...	...	...	1	...	...	
			42·2	13	8	1	...	10	6	1	2	23	...	9	2	...	...	...	...	...	...	...	...	
			33·4	7	4	2	25	11	2	...	12	17	2	2	5	...	...	...	...	...	...	...	...	
		Basin of the Kun chaung ...	70·6	7	7	2	4	21	7	1	10	7	...	2	45	...	...	...	...	...	...	...	...	
		Basin of the Theinbyaung (Zayin) chaung.	45·4	2	12	11	20	1	8	14	11	1	1	4	7	...	...	...	...	...	...	...	...	
			39·4	12	9	9	20	5	2	3	4	5	1	2	20	...	...	...	...	...	...	...	...	
			55·4	...	8	15	10	1	3	4	6	3	...	18	...	...	...	...	...	...	...	...	...	
			38·0	3	5	6	12	3	4	...	...	...	...	...	4	...	...	...	...	...	...	...	...	
			40·2	48	19	13	7	13	7	2	...	...	...	...	7	...	...	...	...	...	...	...	...	
		Basin of the Sulòk chaung	43·2	4	7	9	9	2	2	2	2	9	2	...	25	...	...	...	...	...	2	...	5	
			57·4	3	14	21	26	7	5	4	9	6	2	1	31	...	...	...	...	...	3	...	2	
		Basin of the Nagebòn chaung ...	52·0	22	32	24	42	13	16	12	9	76	...	11	17	...	...	...	...	...	...	...	...	
			32·0	9	14	22	24	4	2	5	3	25	...	6	37	...	...	...	...	...	...	...	...	
		Total ...	590·4	157	148	127	203	100	68	49	71	180	9	55	213	...	...	...	...	...	6	...	7	
		Average per 100 acres	...	·26	·24	·22	·33	·17	·11	·08	·12	·30	...	·09	·36	...	...	...	...	...	...	...	...	
						1·07			·48				·41											
							1·55						·77											
	Sinthe-Sittaung Cutch Forests.	Sinthewa ...	42·6	1	1	...	...	...	...	...	...	...	...	...	...	...	*11	...	†139	...	...	...	...	* All over 6 feet in girths. † Under 6 feet in girth.
			40·0	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	199	...	...	...	...	
			32·8	...	1	5	12	...	...	...	...	...	...	...	...	...	5	...	216	...	...	...	...	
			25·0	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	7	...	...	...	...	
		Zibyubin	44·0	...	...	...	...	...	...	...	...	...	...	...	...	...	19	...	631	...	...	...	...	
			46·6	...	3	15	42	...	...	...	..	...	...	...	...	...	34	...	390	...	...	...	...	
			29·0	3	5	3	36	...	...	...	...	...	...	...	...	...	10	...	199	...	...	...	...	
			41·0	3	4	6	42	...	...	...	...	...	...	...	...	...	9	...	152	...	...	...	...	
		Legethein... ...	36·0	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	261	...	...	...	...	
			37·6	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	235	...	...	...	...	
		Yònbin Naung ...	40·0	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	
			40·2	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	131	...	...	...	...	
		Yenibauk ...	50·0	2	3	12	23	...	...	...	...	...	...	...	...	...	...	...	322	...	...	...	...	
			25·4	...	1	2	...	...	...	...	...	...	...	...	...	...	9	...	102	...	...	...	...	
			42·0	5	7	6	4	...	...	...	...	...	...	...	...	...	2	...	74	...	...	...	...	
			23·0	...	1	7	13	...	...	...	...	...	...	...	...	...	8	...	143	...	...	...	...	
			16·0	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Hletinzeik ...	32·0	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	
Pyinmana			16·0	...	5	1	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			60·0	5	9	12	3	...	...	...	...	...	...	...	...	...	1	...	90	...	...	...	...	

	Kyidaung	58·0	1	4	12	55	...	...	...	...	...	...	...	...	...	1	...	158	...	...	...	...	
		51·8	...	...	3	30	...	...	...	...	...	...	...	...	...	1	...	97	...	...	...	...	
		67·6	3	10	6	29	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	
	Yozin	48·4	1	1	10	123	...	...	...	...	...	...	...	...	...	3	...	205	...	...	...	...	
		48·0	3	8	32	45	...	...	...	...	...	...	...	...	...	2	...	115	...	...	...	...	
		51·3	4	8	20	88	...	...	...	...	...	...	...	...	...	1	...	104	...	...	...	...	
	Kyidaunggan	72·0	2	7	14	65	...	...	...	...	...	...	...	...	...	3	...	176	...	...	...	...	
		48·0	11	30	59	72	...	...	...	...	...	...	...	...	...	...	...	63	...	...	...	...	
		24·8	...	1	16	1	...	...	...	...	...	...	...	...	...	...	...	20	...	...	...	...	
	Kyaukkwet	40·8	1	...	6	18	...	...	...	...	...	...	...	...	...	...	...	16	...	...	...	...	
		40·0	...	2	10	46	...	...	...	...	...	...	...	...	...	...	...	46	...	...	...	...	
		44·0	2	...	1	15	...	...	...	...	...	...	...	...	...	...	...	167	...	...	...	...	
		41·6	...	1	2	13	...	...	...	...	...	...	...	...	...	...	...	119	...	...	...	...	
	Shwèungo	56·6	...	...	8	85	...	...	...	...	...	...	...	...	...	...	...	257	...	...	...	...	
		49·8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	139	...	...	...	...	
		32·4	...	...	...	32	...	...	...	...	...	...	...	...	...	...	...	266	...	...	...	...	
	Ywètin	40·0	...	1	6	27	...	...	...	...	...	...	...	...	...	...	...	103	...	...	...	...	
		50·0	...	...	2	42	...	...	...	...	...	...	...	...	...	2	...	120	...	...	...	...	
	Khayan Tatgon	55·4	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	159	...	...	...	...	
		48·0	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		53·8	...	...	5	90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Aing Gyi	...	1	2	1	35	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	
		48·6	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	168	...	...	...	...	
		49·0	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	143	...	...	...	...	
		1,814·6	50	118	283	1 080	...	...	...	...	...	...	...	...	...	146	...	5,926	...	...	...	...	
	Per 100 acres ...	...	0·3	·06	·16	·60	...	...	...	...	...	...	...	...	...	·08	...	3·27	...	...	...	...	
	Add area examined ...	500·4		·84			...	...	...	...	...	...	...	...	...		3·35						
	Total ...	2,404·4																					
										YAW DIVISION.													* All under 3 feet in girth.
1	From Kyauktu village on Pindaung chaung east up the elephant path to the watershed.	16·2	57	97	74	110	13	...	...	...	29	...	11	50	77	...	*152	11	...	4	...	5	Only 22·2 acres teak-bearing.
2	South-east from Kyauktu ...	11·5	13	10	23	13	7	4	6	22	10	...	20	14	...	...	...	...	...	...	...	...	
3	East of North Kyaw village on Pindaung chaung.	30·8	18	26	29	31	18	12	38	31	4	...	13	...	...	...	...	...	...	...	...	...	Only 18·2 acres teak-bearing.
5	South-east from Wabin on Pindaung chaung up the path to Lindaung as far as watershed.	29·4	14	1	4	4	22	14	16	13	12	...	7	13	118	...	116	...	...	...	...	...	Only 15·1 acres teak-bearing.
4	From North Kyaw along the Yónzin footpath watershed.	44·6	...	...	...	...	...	...	...	...	...	...	...	...	52	...	133	...	...	...	...	...	No teak.
6	East from Pindaung along Nadet footpath to watershed.	72·0	...	...	...	...	...	...	...	...	...	...	...	...	136	...	104	...	...	...	...	...	No teak.
7	From Pindaung to Peinnè ...	59·4	36	32	27	7	14	14	16	2	7	1	3	3	241	...	150	...	...	19	...	20	Only 19·2 acres teak-bearing.
8	From Peinnè village north along Budaung path for 173 chains.	34·6	3	11	13	15	1	9	11	10	1	1	2	...	120	...	152	...	...	...	...	...	Only 20·4 acres teak-bearing.
9	Along Budaung path from point 173 chains from Peinné watershed.	51·8	8	14	11	3	29	9	23	5	...	...	...	...	320	...	145	...	...	18	...	28	Only 43·8 acres teak-bearing.
10	North-west from Peinnè along footpath to Kyi as far as watershed.	35·6	17	29	11	13	3	9	7	6	6	...	7	...	125	...	72	...	...	17	...	22	Only 18·0 acres teak-bearing.
	Carried over ...	386·1	166	220	192	196	107	71	116	89	69	2	63	80	1,189	...	1,024	11	...	58	...	75	

Statement showing Summary of Valuation Surveys for the year 1890-91—concluded.

District.	me of forest.	Locality.	Area in acres counted out.	Teak trees counted out. Sound green teak. I	II	III	IV	Unsound green teak I	II	III	IV	Girdled teak. Sound.	Unsound.	Under 6 feet.	Teak stumps.	Dead teak trees.	Cutch. Above 3 ft. girth.	Between 1 ft. 6 ins. and 3 ft.	Below 1 ft. 6 ins. girth.	Stumps.	Padauk. Over 6 feet girth.	Between 6 feet girth.	Below 6 ft. girth.	Remarks.
		YAW DIVISION—continued.																						
		Brought forward ...	386·1	166	220	192	196	107	71	116	89	69	2	63	80	1,189	...	1,024	11	...	58	...	75	
Pyinmana	11	From Anya Panmalun east along Sabyin footpath to watershed, then along the watershed to Pindaung path, then along this path to Ache Panma Lun.	51·3	5	3	10	5	5	6	3	5	4	...	...	...	247	...	459	...	...	69	...	86	Only 8·5 acres teak-bearing.
	12	South from point on Kyauksit chaung, 145 chains, from Hnget chaung.	18·6	...	...	...	...	...	...	...	...	...	...	...	...	30	...	17	...	...	...	...	...	No teak.
	13	From Pasòk to Leywa ...	30·6	...	2	3	...	1	4	8	11	...	1	...	...	34	...	30	...	...	...	...	...	Only 7·7 teak.
	14	From Pasòk to Pindaung ...	105·4	...	...	...	...	...	...	...	...	...	...	...	...	190	...	300	...	...	...	...	...	53·4 only cutch bearing; no teak.
		Total ...	592·0	171	225	205	201	113	81	127	105	73	3	63	80	1,690	...	1,830	11	...	127	...	161	173·1.
		Chaungu west	50·6	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	No teak.
		Yebyu	48·0	29	15	41	146	4	...	...	...	5	...	...	2	...	...	...	...	...	...	...	..	
		From Yebyu along Tilin cart-road to watershed of Kyaw chaungs, then south along watershed, and then back to Yèbyu.	126·6	75	168	145	121	3	...	...	...	29	...	...	33	...	...	...	...	...	..	...	...	
		West from camp on Yèbyu chaung, 4 miles of Yèbyu.	79·4	37	39	70	91	3	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	
		Along Yèbyu-Kabbaing road	101·8	33	64	61	235	3	...	...	...	36	...	36	20	...	...	...	...	...	...	...	...	Only 91·6 acres teak.
		South Kabbaing west ...	96·4	69	148	218	312	8	...	...	...	36	...	...	11	...	...	...	...	...	...	...	...	Only 83·2 acres 1 teak.
		South Kabbaing East to Lattaw, Thambyagon, and North Kabbaing.	75·2	34	58	83	114	3	...	...	...	48	...	...	13	...	...	...	...	...	...	...	...	
		North Kabbaing west up the valley of Yenyo chaung to watershed of Kyaw chaung.	59·4	39	50	70	81	1	...	...	...	25	...	...	8	...	...	...	...	...	...	...	...	Only 39·4 acres teak.
		North Kabbaing east to old village of Wakwa.	21·6	18	41	44	45	...	...	...	...	26	...	...	10	...	...	...	...	...	...	...	...	Only 15·6 acres teak.
		Kyaukmasin west ...	77·0	17	42	80	108	...	...	...	...	13	...	...	...	...	...	...	...	...	...	...	...	Only 43·0 acres teak.
		Kyaukmasin east ...	66·0	4	25	39	32	...	...	...	...	9	...	...	10	...	...	...	...	...	...	...	...	

Pokokku	From point on Kyaukmasin road, 140 chains, from Kyaukmasin to Zaho and back to Kyaukmasin.	68·4	38	36	65	92	2	...	...	...	31	...	...	5	...	...	...	...	...	..	...	...	...	Only 60·0 acres teak.
	Along Kyaukmasin-Kyawtha road.	46·0	21	38	56	57	4	...	...	...	6	...	...	6	...	...	...	...	...	...	...	...	...	
	Kyawtha north-east	46·4	13	8	21	25	2	...	...	...	11	...	...	6	...	...	...	...	...	...	...	...	...	Only 35·4 acres teak.
	Kyawtha west	45·6	38	75	107	93	2	...	...	...	12	...	...	4	...	...	...	...	...	...	...	...	...	Only 28·0 acres teak.
	Kyawthha to Zaho	21·4	15	12	13	8	1	...	...	...	4	...	1	6	...	...	...	...	...	...	...	...	...	
	Along Kyawtha-Bambyin road...	71·6	39	61	115	80	1	...	...	...	45	...	...	30	...	...	...	...	...	...	...	...	...	Only 49·6 acres teak.
	Along Bambyin-Wabin road ...	96·0	39	35	129	182	2	...	...	...	46	...	...	26	...	...	...	...	...	...	...	...	...	Only 62·0 acres teak.
	Wabin west...	57·6	26	44	21	41	1	...	...	...	26	...	...	19	...	...	...	...	...	...	...	...	...	Only 20·0 acres teak.
	Wabin east	53·4	8	55	84	104	1	...	...	...	19	...	...	11	...	...	...	...	...	...	...	...	...	Only 20·0 acres teak.
	Along Wabin-Kyaw road ...	89·0	8	20	34	67	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	Only 12·0 acres teak.
	Kyaw west	51·4	26	35	14	26	...	...	...	...	3	...	...	10	...	...	...	...	...	...	...	...	...	Only 36·0 acres teak.
	Kyaw east	44·0	...	...	...	...	...	...	No	teak.	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Tanyin to Kyaukmasin ...	52·2	15	33	43	32	...	...	...	...	15	...	11	13	...	...	Over 3 feet girth.	...	Over 6 feet girth.	...	Over 3 feet girth.	...	Over 6 feet girth.	
	Kyaw to Saga	94·8	6	20	32	56	2	...	...	...	5	...	3	11	...	...	35	...	144	...	11	...	46	
	Saga west	67·6	32	113	133	122	5	...	...	...	12	...	...	9	...	...	56	...	55	...	20	...	30	
	Saga east	49·6	...	...	...	No	teak.	...	...	...	...	...	...	...	...	...	13	...	44	...	1	...	22	
	Saga to Yèwaing	86·2	4	37	76	108	1	...	...	...	4	...	...	4	...	...	13	...	38	...	12	...	60	Only 22·0 acres teak.
	Yèwaing west	18·4	19	120	130	64	1	...	...	...	3	...	1	4	...	...	...	...	...	...	15	...	11	
	Yèwaing east	24·6	...	...	...	No	teak.	...	...	...	...	...	...	...	...	...	...	...	8	...	...	...	18	
	Yèwaing to Kyaukwet	69·2	3	16	23	50	...	...	...	...	4	...	...	1	...	...	...	...	...	...	...	...	...	Only 7·4 acres teak.
	Kyaw north-west	40·8	19	72	132	181	6	...	...	...	45	...	37	28	...	...	68	...	180	...	66	...	80	Only 32·8 acres teak.
	Kyaw to camp on Mondaing chaung.	33·2	5	15	30	89	1	...	...	...	4	...	1	30	...	...	48	...	126	...	20	...	35	
	Camp on Mondaing chaung west	26·0	10	18	20	50	2	...	...	...	9	...	3	13	...	...	...	...	...	...	...	...	...	Only 15·0 acres teak.
	Camp on Mondaing chaung east	45·4	35	116	228	333	...	...	...	...	113	...	46	42	...	...	...	...	...	...	35	...	48	
	Maukgôn chaung west ...	24·6	4	9	21	117	2	...	...	...	1	...	1	...	...	...	...	...	...	...	6	...	6	
	Maukgôn to Kwè chaung ...	28·2	2	22	52	103	...	...	...	...	2	...	...	4	...	...	...	...	...	...	...	...	...	Only 20·0 acres teak.
	Kwè chaung north-west ...	35·6	25	63	110	108	2	...	...	...	1	...	...	...	...	...	22	...	73	...	38	...	133	
	Kwè chaung north-east ...	43·2	83	151	132	247	...	...	...	...	48	...	21	20	...	...	...	...	...	...	59	...	40	
	Kyaw to Kyun chaung ...	64·2	8	13	55	147	2	...	...	...	26	...	17	10	...	...	146	...	431	...	3	...	41	
	Kyun chaung to Kinè-è ...	83·4	13	61	84	212	...	...	...	...	27	...	15	21	...	...	8	...	40	...	1	...	10	Only 35·2 acres teak.
	Kinè-è south	47·2	14	20	30	67	6	...	...	...	7	...	...	10	...	...	18	...	87	...	3	...	20	Only 27·2 acres teak.
	Kinè-è to Letpan	111·2	13	45	94	170	1	...	...	...	...	...	...	...	...	...	3	...	15	...	60	...	161	Only 35·2 acres teak.
	Total ...	3,543·4	936	2,013	2,935	4,316	72	...	...	...	668	...	193	450	...	...	432	...	124	...	350	...	770	Only 790·6 acres teak.
	Average per acre ...	100·0	36	79	118	169	3	...	...	...	26	...	7	17	...	...	16	...	33	...	13	...	30	

APPENDIX D.

Statement of Teak trees girdled during the season 1890-91.

Division.	Girdling officer.	Revising officer.	Range.	District.	Locality.	Number of teak trees.
Bhamo.	Mr. C. W. Palmer, Deputy Conservator of Forests.	Mr. C. W. Palmer, Deputy Conservator of Forests.	.....	Bhamo	On small stream (A) Mangin proposed reserve ...	120
					On Lwèpin chaung	114
					On left bank of Namkat chaung	26
					In Naungkan forest	26
					In Uya-atha forest (west side)	211
					In Uya-atha forest (east side)	52
					On bank of Namsin chaung close to junction with Namkanlet chaung.	15
					On ridge east of Papaung hill, inside proposed Mingin reserve.	57
					On road to Mangin sakan	24
	Mr. E. A. O'Bryen, Assistant Conservator of Forests.	Mr. E. A. O'Bryen, Assistant Conservator of Forests.	.....		In Mulong chaung	172
					Between Mangin and Maung Po sakan	85
					In chaung (B) Mangin forest	147
					In chaung (C) Mangin forest	70
					Outside reserve on left bank of Namket chaung below Mangin sakan.	38
					Above Hlethagôn village, inside reserve	4
					In Sinbo chaung	139
					Total ...	1,300
Chindwin	Mr. Slade, Deputy Conservator of Forests.	Mr. Slade, Deputy Conservator of Forests.	.....	Upper Chindwin	Yu chaung: Nansawin chaung, south bank ...	165
					Nansawin chaung, north bank ...	330
					Putha chaung, south bank ...	78
					Putha chaung, north bank ...	45
					Nanthalet chaung, south bank ...	303
					Nanthalet-alè chaung	205
					Nanthalet, north bank	358
					Nanthalet-Hnyat chaung	118
					Nansun chaung, main stream ...	549
					Nansun-Yaw chaung	80
					Awin chaung, south bank	235
					Awin chaung, north bank	424
					Nanshwewin chaung, south bank ...	195
					Nanshwewin chaung, north bank ...	169
					Nanshwewin sakan chaung ...	123
					Mauksalun chaung	195
					Yenan chaung	102
					Minya chaung	49
					Mawku chaung, south bank ...	70
					Mawku chaung, north bank ...	112
					Waba chaung	96
					Leikpôk chaung, south bank ...	181
					Leikpôk chaung, north bank ...	265
					South Yônbin chaung, west bank ...	620
					South Yônbin chaung, east bank ...	729
					North Yônbin chaung, south bank ...	483
					North Yônbin chaung, north bank ...	556
					Kalun chaung, south bank ...	379
					Kalun chaung, north bank ...	220
					Payôn chaung	242
					Wesalaung chaung: Kadu chaung Kyaukkwetgyi chaung ...	384
					Kadu chaung Kyaukkwetgalo chaung	112
					Main stream	236
					South Letet	312
					North Letet	154
	H. H. Forteath, Assistant Conservator of Forests.	H. H. Forteath, Assistant Conservator of Forests.	.....		Wesalun: Shwekya chaung	303
					Kyaukkôngyi chaung, main stream ...	451
					Kyaukkôngyi chaung, South Letel ...	378
					Kyaukkôngyi chaung, North Letel ...	479
					Sanka chaung	281
					Kun chaung	75
					Kyaukdaing chaung	129
					Kyaukyôk chaung	143
					Main stream, east bank	98
					Main stream, west bank	165
	Mr. H. N. Thompson, Assistant Conservator of Forests.	Mr. H. N. Thompson, Assistant Conservator of Forests.	.....		Nanku chaung: Hepet chaung, east bank	791
					Hepet chaung, west bank	661
					Hepet chaung, headwaters	265
					Thida chaung, west bank	859
					Thida chaung, east bank	583
					Thida chaung, headwaters	330
					Chawhla chaung: Chaungya chaung, left bank ...	81
					Chaungya chaung, right bank ...	105
					Main stream, left bank	285
					Main stream, right bank	122
					Sethni chaung: Bôn chaung, left bank	410
					Bôn chaung, right bank	98
					Carried over ...	16,143

Statement of Teak Trees girdled during season 1890-91—concluded.

Division.	Girdling Officer.	Revising Officer.	Range.	District.	Locality.	Number of teak trees
					Brought forward ...	16,148
Chindwin.	Mr. H. N. Thompson, Assistant Conservator of Forests. Mr. H. H. Forteath, Assistant Conservator of Forests.	Mr. H. N. Thompson, Assistant Conservator of Forests. Mr. H. H. Forteath, Assistant Conservator of Forests.		Upper Chindwin.	Maw river: Aung chaung, left bank	59
					Aung chaung, right bank	30
					Ngôn chaung, right bank	103
					E. chaung, left bank	15
					E. chaung, right bank	86
					Tillin, left bank	3
	Mr. H. N. Thompson, Assistant Conservator of Forests.	Mr. H. N. Thompson, Assistant Conservator of Forests.	.....	Western Pagyi.	North Yama chaung: Kyaukkôn chaung, left bank ...	95
					Kyaukkôn chaung, right bank ...	125
					Tônwin chaung, left bank	138
					Tônwin chaung, headwaters ...	44
					Myinkya chaung, left bank ...	45
					Myinkya chaung, right bank ...	59
					Myinkya chaung, headwaters ...	30
					Than chaung, left bank	128
					Than chaung, right bank	51
					Pôndaung chaung, left bank ...	136
					Pôndaung chaung, right bank ...	85
					Kywetna chaung, left bank ...	52
					Kywetna chaung, right bank ...	56
					Mahabo chaung, left bank ...	117
					Mahabo chaung, right bank ...	102
					Tin chaung, left bank	118
					Tin chaung, right bank	65
					Ngahlè chaung, left bank	141
					Ngahlè chaung, right bank	58
					Chaw chaung, left bank	51
					Chaw chaung, right bank	118
					Taungthè chaung, left bank ...	100
					Taungthè chaung, right bank ...	94
					Sagalè chaung, left bank	137
					Sagalè chaung, right bank	162
					Hpalè, left bank	170
					Hpalè, right bank	62
					Kyaukshaw chaung, left bank ...	82
					Kyaukshaw chaung, right bank ...	15
					Thwè chaung, left bank	108
					Thwè chaung, right bank	112
					Tin chaunggyi, left bank	158
					Tin chaunggyi, right bank	116
					Pepin chaung, left bank	51
					Pepin chaung, right bank	46
					Yeshin chaung, left bank	63
					Yeshin chaung, right bank	50
					Ngapyu chaung, headwaters ...	45
					Sittaw chaung, left bank	112
					Myabin chaung, right bank ...	8
					Yenauk chaung, headwaters ...	13
					O-tain chaung, left bank ...	101
					Kyaukye chaung, left bank ...	12
					Kyaukye chaung, right bank ...	11
					Kyaukye headwaters	4
	Maung Maung, Ranger.	Mr. H. N. Thompson, Assistant Conservator of Forests.	.....	Kawin.	Thingadôn chaung: Yeshin chaung, left bank	14
					Baingdôn chaung, left bank ...	24
					Baingdôn chaung, right bank ...	17
					Baingdôn chaung, headwaters ...	2
					Yenan chaung, left bank	53
					Tigyi chaung, left bank	3
					Total ...	20,247
Yaw.	Mr. H. N. Thompson, Assistant Conservator of Forests.	Mr. H. N. Thompson, Assistant Conservator of Forests.	.....	Kyaw.	Upper Kyaw: Maukkôn, left bank	24
					Maukkôn, right bank	11
					Kweseik, left bank	5
					Kweseik, right bank	11
					Kinu chaung, left bank	277
					Kinu chaung, right bank	185
					Ngamaing, left bank	33
					Aninshelè, headwaters	22
					Pyinkin, left bank	27
					Pyinkin, right bank	45
					Taung chaung, left bank	60
					Thè chaung, right bank	42
					Total ...	742
Mandalay.	Mr. R. C. Dun, Sub-Assistant Conservator of Forests.	Mr H. Calthrop, Deputy Conservator of Forests.	Pyaungshu	Yatsauk.	Nammalaung	193
					Namlan	102
					Total ...	295
Mu.	Mr. J. C. Murray, Deputy Conservator of Forests.	Mr. J. C. Murray, Deputy Conservator of Forests.	.....	Katha.	Sinlin forest, Budaung chaung	613
					Thaw forest, Subak chaung	60
					Total ...	673
					GRAND TOTAL ...	23,257

G. B. C. P. O.—No. 1986, B. S., 27-8-91—300.